

# City of Covington Community Forestry Plan



Covington Parks and Community Services Department  
January 2006

# CONTENTS

## **INTRODUCTION      SECTION ONE**

- Resolution
- Vision Statement
- Comprehensive Plan Goals & Objectives

## **ESTABLISHMENT      SECTION TWO**

- Planning
- Saving Trees During Construction
  - Understanding Trees
  - Evaluate the Site
  - Design
  - Reduce Impacts
  - Final Inspection
- Tree Selection
  - General Appearance
  - Crown
  - Trunk
  - Balled and Burlapped Trees
  - Containerized Trees
  - Caliper Size
- Seedling Planting
- Tree Planting
- Pruning
- Fertilizing
- Watering
- Mulching

## **TREE PROBLEMS      SECTION THREE**

- Diseases
- Non-Living Causes
- Insects
- Diagnosis
- Control

## **MANAGEMENT      SECTION FOUR**

- Parks and Forestry Commission
- Tree Ordinance
- Arbor Day
- Tree City USA
- Living Memorial Tree Program
- Wildlife
- Wetland Protection
- Utilities

## **TREES      SECTION FIVE**

- List of Approved Varieties
- List of Prohibited Street Trees

## **PARK & OPEN SPACE AREAS SECTION SIX**

- Park Location Map
- Cedar Creek Park
- Cedar Valley Park
- Covington Aquatic Center
- Crystal View Park
- Downtown Medians
- Evergreen Park
- Friendship Park
- Jenkins Creek Park
- Jenkins Creek Community Trail
- 180th/240th Street Park
- 164th Avenue Skate Court
- Unnamed Open Spaces

## **ACTION PLAN      SECTION SEVEN**

- Action Plan
- Potential Funding Sources



## INTRODUCTION

## INTRODUCTION

The City of Covington Comprehensive Forestry Plan was developed to provide detailed information and direction with respect to tree resources located within park and open space areas. It will function as a support document for the Parks, Recreation and Open Space Comprehensive Plan, Parks Design and Development Standards and Business Plan.

Planning for the document began in November 2005. Research by the Parks and Forestry Commission and Parks and Community Services Department staff continued through February 2006 and culminated with the development of the plan document. The following is the resolution adopting the Comprehensive Forestry Plan.

RESOLUTION NO. \_\_\_\_\_

### A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COVINGTON, KING COUNTY, WASHINGTON, ADOPTING A COMMUNITY FORESTRY PLAN

WHEREAS, the City of Covington desires to continue providing, maintaining and developing high quality parks, recreation facilities and open spaces for the use of community residents and visitors; and

WHEREAS, the City of Covington is desirous of securing for its residents an attractive, safe living environment for a high quality of life; and

WHEREAS, the City Council recognizes the contribution of trees to the livability of the community; and

WHEREAS, on XX,XX, 2006 the Covington Parks and Forestry Commission passed a motion recommending that the City Council adopt the Community Forestry Plan; now therefore

BE IT RESOLVED by the City Council of the City of Covington, King County, Washington, as follows:

Section 1. The Covington City Council hereby adopts the Community Forestry Plan attached hereto as Exhibit "A".

## VISION STATEMENT

The residents of Covington developed a Vision Statement to outline their desires for the community and to serve as an aid for the City Council in managing the operation of the City. The following is the adopted Vision Statement:

**VISION:** The City of Covington is a place where community, businesses and civic leaders are partners in building a city that is family-oriented, safe and pedestrian-friendly. A community that proudly invests in enhancing our small town character and natural environment, and provides diverse recreational opportunities, as well as remaining financially responsible.

**DOWNTOWN** Covington will have a downtown that is well designed and pedestrian-friendly with a permanent combination of commercial and residential areas.

**RESIDENTIAL** Covington residential areas will be safe, diverse, and accessible and will have well-maintained neighborhoods that instill a sense of community.

**CITIZEN** input is an integral part of the shaping of our community.

**FAMILIES & YOUTH** Covington will help instill a sense of responsibility and provide opportunities for a variety of cultural and recreational activities for all ages.

**HUMAN SERVICES** will address local needs by encouraging a partnership between private and public organizations.

**CITY GOVERNMENT** will remain efficient, accessible, responsive, accountable, and financially responsible to the community.

**BUSINESSES** will be in partnership with the community and have a long-term commitment to Covington.

Our **ENVIRONMENT** will be preserved with responsible limitations while enhancing the area's natural beauty.

**DESIGN STANDARDS** Covington will have high quality design and construction standards that give buildings and structures a sense of permanence and provide for an aesthetically pleasing skyline in our community.

**PARKS AND OPEN SPACE** are an important part of our community's future and quality of life.

## COMPREHENSIVE PLAN

The purpose of the Parks and Community Services Comprehensive Plan Element is to provide goals and policies to guide the acquisition and development of parks, open space, trails, recreation, culture and art, and human services facilities and programs throughout the City of Covington. The Parks and Community Services Element provides goals and policies aimed at meeting the City's recreational, social, and cultural needs.

The element and the Parks Design and Development Standards, a companion document, adopted herein by reference, provide an inventory of park and recreation facilities and programs in Covington; outline accepted standards for parks, open space, and recreation facilities; set standards for such services; and present a strategy for providing additional facilities and programs to meet the needs of the City's residents and visitors.



ESTABLISHMENT



## PLANNING

Plan before you plant. This is always the rule when planting, but it becomes even more essential in the urban setting. Car doors, utility lines and environmental factors influence urban trees. Careful planning reduces the impact of these factors.

When planting trees along a street, locate the trees with care to avoid potential damage by cars. Position the trees in the center of the parking space for diagonal parking areas. For streets with parallel parking, plant the tree at the parking space marker to avoid car doors hitting and damaging the trees. See figure 1.

Tree branches contacting power lines are major cause of power outages. Power lines have established heights which can be included in initial plans. Primary power lines average 28 feet above the ground, secondaries usually are 25 feet high and telephone and cable lines are 20 feet from the ground. Smaller trees with mature heights less than the line height will not interfere with power lines and therefore will not interrupt electrical service. Street lights, fire hydrants and distances from curbs must be taken into consideration when planting. Required distances may be found in the City Street Design Standards.

Utility lines also exist underground. Determine the location of any underground lines before digging.

Environmental conditions of the site greatly impact the trees. The site's soil influences the future growth of the tree. Sandy soils drain faster but are less fertile than clay soils. Disturbed soils around new buildings often are very compacted, lacking enough moisture and air space to support good root growth. If the soil at the site is poor, tolerant plants must be chosen.

Light and exposure have a bearing on the growth of plants. Is the planting location surrounded by buildings, restricting sunlight exposure to a few hours a day? Perhaps the site is on the south side of a building near a parking lot. Reflected heat in this location will be a vital concern. Some plants grow better under low light conditions while others thrive in full sun. Select the species according to the environment in which they are to be planted.

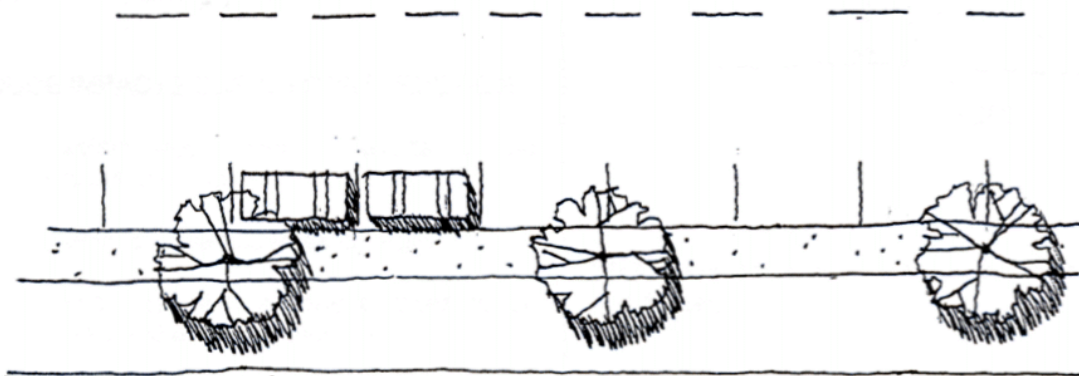


Figure 1. Typical Street Tree Location



# SAVING TREES DURING CONSTRUCTION

The following tips will help reduce impacts on trees during construction and avoid turning healthy trees into future hazards. These steps should be followed when developing new park areas and receiving property dedicated to the city.

## UNDERSTAND TREES

Trees are living things that require space, soil, water, air and nutrients to live. Trees grow best in groups with understory shrubs, ground covers, and smaller trees. The soils and forest litter around them contribute to their health.

## EVALUATE THE SITE

A ISA Certified Arborist should evaluate the trees and other vegetation on the site and determine where the best trees and other plants are located. Trees should be evaluated on the basis of species, size, condition, location and soils. They should be flagged in the field and located on the site plan.

## DESIGN

With desirable trees located on the plan and in the field, design the construction that avoids the best trees. Determine their critical root zone in relation to the design. Also remember that changing drainage patterns on the site will effect the survivability of the trees.

## REDUCE IMPACTS DURING CONSTRUCTION

- o Explain tree protection efforts to the project manager.
- o Remove unwanted trees carefully.
- o Fence critical root zone of trees to be preserved as (Illustration).
- o Install tree protection signage and explain tree protection plan to contractors and sub-contractors.
- o Do not allow any storage, parking, dumping, or excavating within the critical root zone.
- o Disturbance within the critical root zone should be evaluated by the arborist.

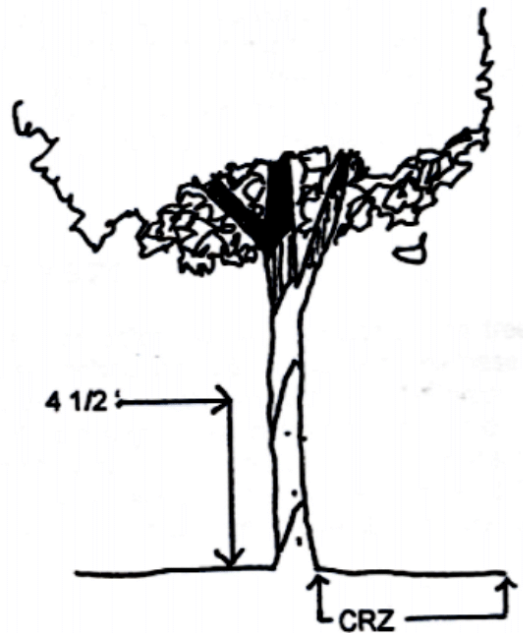
- o Carefully prune limbs or roots properly before they are broken. And damaged.
- o Monitor the site to maintain tree protection efforts.

## FINAL INSPECTION

After construction is complete, make a final inspection for any needed follow up care.

## ILLUSTRATION

CRZ=1 foot for every 1 inch diameter of the tree at 4 1/2 feet.



## TREE SELECTION

Selecting quality trees to plant will help ensure a successful planting. All plants should meet or exceed American Standards for Nursery Stock ANSI Z60.1. The following general specifications should be observed when selecting trees:

### GENERAL APPEARANCE

The tree should have a balanced shape. Balled and burlapped trees are often bought during the dormant season, so they have no leaves. For containerized trees, make sure there are no bare spots in the foliage, missing or damaged limbs or discolored or spotted leaves, unless it's the end of the summer season. Most tree species should have a single strong "central leader". Check the size of the crown and rootball in relation to the caliper size of the tree to correspond with the American Standard for nursery Stock.

### CROWN

For most tree species, make sure the branches come off the leader trunk at between a 45 degree and a 90 degree angle. The more the angle the better. Wounds from pruned branches should be callused over or well on their way. Branches should be distributed evenly throughout the tree. This is called good scaffolding. There should not be any cluster of branches. Branches should be about one quarter of the height of the tree. Too long limbs place undue burden on the tree.

### TRUNK

The trunk should be straight. Look for insect damage such as bore holes or sawdust. The trunk should be free of discolored, swollen or sunken areas. No wound should be longer than one quarter of the trunk's circumference.

### BALLED AND BURLAPPED TREES

The trunk should not move independently of the soil. The burlap should be tightly wrapped. The trunk should be in the center of the rootball. Tree roots are pruned and cut before they are wrapped. Avoid trees with cut roots tips wider than an average finger. The more fibrous or hairy roots there are, the better. It is stressful for any tree to be replanted, and more intact roots give the tree a better chance to survive.

### CONTAINERIZED TREES

Potbound roots are in danger of girdling – encircling the inside of the pot. This occurs when the tree has outgrown its container; girdled roots strangle the tree and do not provide an adequate support system when the tree is planted. Avoid tree that have large roots coming out of the water holes or with roots circling on the surface of the soil.

### CALIPER SIZE

Caliper size refers to the diameter of the tree's trunk six inches above the ground or the base of a tree where the roots connect. It is an important part of selecting a tree because it will help you ensure that you are getting the proper dimensions for both the height of the tree and size of the rootball. Ideally the larger the rootball the better.

## SEEDLING PLANTING

The way seedlings are handled is vital to their survival. Seedlings need to be refrigerated until planting time; their roots should not be allowed to dry out; and they need to be kept out of direct sunlight. The following are examples of the correct method of planting seedlings and some common errors.

### CORRECT



### PLANTING ERRORS



Turned up roots



Tangled roots



Rock



Air pocket



Too shallow



Too deep

# TREE PLANTING

Step 1.

Dig the planting hole deep enough so the tree, when set in the hole will be at the level it was in the nursery and wide enough to allow roots to be spread without crowding or bending them. This is typically three times the diameter of the root ball. Loosen the soil on the sides of the hole with a shovel or spade fork.

Step 2.

Balled and burlapped trees:

Set the root ball in the hole and remove the burlap or fold it down beneath the bottom half of the root ball. Be sure to remove all twine or wires from around the base of the tree and top of the root ball.

Container trees:

Remove the plant from the container and set the root ball on its side. Slice through the lower half of the root ball with a spade to break up the tight circle of roots. Loosen the root ball to stimulate root growth into the surrounding soil. If the roots are still soft and fibrous, crumble away an inch of the growing medium from around the outside of the ball and pull out the roots.

Bare root trees:

Prune out injured or tightly circling roots. Place in hole with roots spread equally around the hole. Plant bare root trees in the dormant season only. Keep roots covered and moist before planting.

Step 3.

Using the same soil that was dug from the hole, firmly pack the soil in and around the root ball. Do not add any soil amendments.

Step 4.

Water well with a slow soaking to wet the soil to the full depth of the rootball. Be sure to apply water directly to the rootball as well as the surrounding soil. Build up a three inch ring of soil to form a saucer to hold the water in the root zone. Deeply water newly planted trees every two weeks for the first two summers. Deep watering encourages roots to grow down which provides the tree with more support. Light surface watering causes roots to grow horizontally increasing the risk of sidewalk heaving, blowing over in wind storms and reducing survivability in periods of drought.

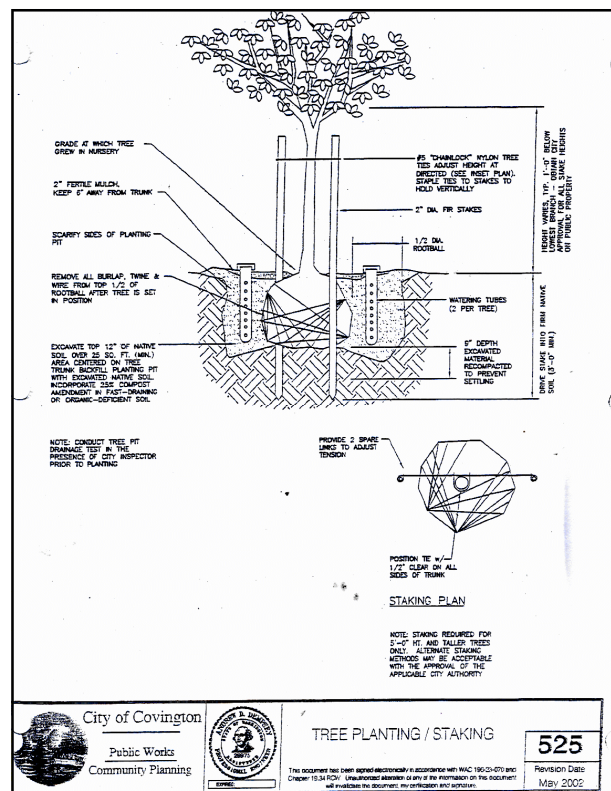
Step 5.

Mulch an area extending approximately two feet from the trunk. To avoid crown rot, keep the mulch away from direct contact with the lower trunk.

Step 6. Stake only if the tree needs support or protection with two stakes driven outside the rootball. Tie the stakes to the tree at the lower third of the trunk or just to the height necessary to hold the trunk upright while allowing the top of the tree to flex freely in the wind. Common tie materials include canvas web belting, chainlock, or rubber from automobile tires but avoid materials with wire centers. Trees should be checked periodically to determine if they still require support. Remove the tree stakes after one year.

Step 7. Prune very lightly if needed to remove dead or broken branches.

Step 8. The following growing season fertilizer may be added in needed.



### Tree Planting Detail from City Design Standards

## PRUNING

Pruning is an essential operation for the growth and well being of trees. The health of the tree is improved or maintained by removing dead, diseased and damaged wood. The quality of flowering and fruiting are increased with proper pruning.

There are two types of pruning cuts: thinning and heading. A thinning cut reduces the number of shoots by removing the entire branch. This approach is appropriate if your objective is to remove dangerous or low hanging branches, or to remove growth from the center of the tree to allow light and air to penetrate the canopy. Thinning cuts also help to establish a good branching structure by balancing spacing between branches.

Heading cuts shorten branches and often increase the number of new shoots by stimulating the buds near the cut. The new growth can be directed by where the cut is made. If a cut is above a bud facing outward, the bud will head to produce a shoot what will grow away from the center of the tree.

Heading is the procedure used when a tree is topped to reduce its height. This procedure will not lead to a shorter tree, through, because more shoots will be produced and this new growth is stiffer, resulting in an increased possibility of wind breakage. Early training and selecting the right tree for the right location is the best way to maintain a tree at a specific height. Topping is not permitted by Ordinance with the exception of responding to damage.

When a pruning cut is made, the wound should be as small as possible. Before a branch is to be removed, locate the branch collar. The collar is a small fold of bark at the base of a branch where it joins the trunk. Make the cut just outside of this ridge. Cutting into the collar increased the wound size and the possibility of decay. To remove a large branch, undercut it first to avoid tearing the bark (see Diagram 1). Make the first cut (A) on the underside of a branch, slightly out from the branch collar. Remove the branch with the second cut (B) at the edge of the collar. Do not apply a wound dressing to the tree as it may prove detrimental to the tree.

The general procedure for pruning trees is:

1. Remove dead, diseased and damaged wood.
2. Remove or head back branches that are crossing other branches or going in the wrong direction.
3. Thin, as necessary, to allow light and air into the center of the tree and for even spacing of branches..

Perform most pruning during the dormant season, in late winter before bud break. This timing avoids the sap discharge that occurs when certain trees are pruned during the growing season.

If started when the tree is young, pruning can help establish a strong branch framework that will require less work as the tree matures.



Diagram 1. General Pruning Cuts

## FERTILIZING

A tree that has adequate mineral elements is healthier, stronger, more tolerant of stress, and more aesthetically pleasing. If the fertility level in the soil is low, then the appropriate addition of fertilizer will benefit the plant. Indications of low fertility include: poor leaf color, unusually slow growth, or overall poor tree health. Soil fertility levels can be determined by having the soil tested by a reputable laboratory. There are many firms which specialize in conducting soil tests or the Cooperative Extension or the U.S. Soil Conservation Service for soil test laboratories may be of assistance.

Fertilizers must supply the guaranteed analysis on the label. This analysis represents the percentage of nitrogen, phosphorus and potassium or potash always in that order. Thus a 21-7-14 analysis will contain 21% nitrogen, 7% phosphorus and 14% potassium.

Fertilizers come in slow release and fast release forms and can be applied by a number of different techniques. A granular form broadcast on the soil surface is very common, inexpensive, and easy to apply. If nitrogen is lacking, this method is successful because nitrogen moves easily through the soil. However, it is less effective for these mineral elements, such as phosphorus, that do not move easily through the soil. Insertion of the material into the soil puts the elements where the tree can use them. This process is time consuming. Injecting directly into the trunk increases the risk of over fertilization, does nothing to help the soil and wounds the tree. The best process for an individual situation varies, depending on which nutrients are needed, the equipment that is available, considerations of nearby plants and costs.

Nitrogen is the element most often deficient in the soil. The addition of nitrogen often results in increased growth of established shade trees. A basic formula for nitrogen addition is:

For trees with a trunk diameter of six inches or more, measured 36 inches above soil level, apply .3 to .6 pounds of actual nitrogen per inch of trunk diameter.

For trees with a trunk diameter less than six inches, use .15 to .3 pounds of actual nitrogen per inch of trunk diameter.

Deciding when to fertilize will depend upon the nutrient needed, application method, climate, and soil condition. The most common application times are in late spring when the plants have come out of dormancy and in the late fall when the plants are entering dormancy.



## WATERING

Insufficient water during the growing season may not kill a tree immediately, but drought stress makes trees more susceptible to insect, disease, and environmental problems in subsequent years. Drought and water rationing, two current concerns, contribute to a drought-stressed plant.

There are two ways to reduce summer irrigation and avoid tree stress. The first is through the careful selection of the plant material before planting. Plants that are adapted to the local climate or similar climates, once established are more drought tolerant than plants from regions of dissimilar climates. If a species native to the southeastern United States is planted in Covington, it is more likely to need summer irrigation because its native environment has more summer rainfall. Plants from the Mediterranean and Chile have evolved in climates similar to that of the Pacific Northwest and require similar care to that required by native Northwest plants. Planting species adapted to the local weather pattern will reduce the need for summer irrigation.

The second method is through management techniques. Mulched beds hold moisture and reduce the moisture lost to evaporation. Removing the turf surrounding a tree and mulching that area makes more moisture available for the tree. Weed control is also important. The competition for the soil moisture is reduced and the desirable species have more moisture available.

Whenever irrigation occurs, it is essential that enough water is supplied to thoroughly soak the root area. Frequent, shallow waterings encourage shallow roots that are less likely to survive stressed conditions of drought, wind storms and reduce the risk of sidewalk heaving.

Newly established plantings should be deeply watered every two weeks for the first two summers after planting.



## MULCHING

Mulches offer many benefits. Mulches conserve water by reducing soil moisture lost through evaporation. Mulches effect the soil temperature. Light colored mulches reflect light and can reduce soil temperatures or at least keep them from increasing. Dark mulches perform the opposite function, by heating the soil. Overall, mulched soils maintain a more constant temperature than soil without mulch. Mulches help reduce soil erosion and organic mulches can improve the aeration of heavy soils.

Mulches can cause problems when not used correctly. Some mulches, such as hay and alfalfa, can introduce weed seeds into the planting beds. Mold can develop when the mulches are kept too wet. Some organic mulches, as they decompose, may remove nitrogen from the soil. A light application of a high nitrogen fertilizer mixed into the mulch will help avoid nitrogen deprivation. Repeated heavy applications of mulch can cause injury or death to shallow rooted plants.

Mulch may be applied anytime. Remove all weeds and apply enough mulch to a depth of three to four inches. Make sure the mulch is kept a minimum of four inches away from the trunk of the tree to reduce the potential for pest and disease related problems.

A variety of materials may be used as mulch. Inorganic mulches include black plastic, newspaper, small gravel or rock. Bark chips, hay, compost, and grass clippings are just a few organic materials that can be used as mulches.



## TREE PROBLEMS

## TREE PROBLEMS

Plant problems are caused by a wide variety of factors. Insects and diseases may infect a tree but are not the sole causal agents for a declining health. Environmental stress, mechanical injury, or nutrient deficiencies are just a few examples of other factors influencing the growth of trees.

Factors that can inhibit tree growth can be divided into three categories: Infections living diseases, non-living factors and insect infestations.

### INFECTIOUS DISEASES

Infectious diseases are commonly caused by fungi, through bacteria and viruses also are infectious. There are many ways to categorize tree diseases. The following division is based upon the parts of the plant they affect.

Vascular diseases interrupt the nutrient and water transport within the plant. Typical symptoms include wilting and dead leaves on one or more branches. The inner wood may show discoloration. Dutch elm disease and verticillium wilt are examples of two vascular diseases that strike urban trees.

Leaf diseases cause a variety of symptoms, ranging from dead patches on the leaves to death of the entire leaves. Although visually unappealing leaf diseases seldom cause permanent damage unless severe defoliation occurs over several years. Common leaf diseases include powdery mildew, anthracnose and pine needle-case.

Stem diseases cause cankers and galls. Cankers are dead areas on the tree trunk or branches, often appearing as sunken or discolored areas. Galls are tumor-like growths caused by insects, fungi, bacteria, or viruses. If they occur on large branches or the trunk, the galls can interfere with normal sap flow.

Heart rot often is found on only, non-vigorous shade trees. The heart rot fungi attack the inner wood of a tree or large branch and can shorten a tree's life span by weakening its structure. In this condition, the tree is more susceptible to storm damage or other problems. The presence of mushrooms or shelf fungi on the outside of the tree may indicate heart rot.

Root rot will weaken or kill the root system. Without a healthy root system, the upper sections of the tree are deprived of nutrients and water. Infected roots are discolored with soft decaying spots. Above ground symptoms include stunted growth, small leaves, and dieback of the upper branches. Phytophthora root rot can be serious in the Pacific Northwest.

### NON-LIVING FACTORS

Non-living factors can be divided into three basic categories: environmental stress, chemical injury, and physical damage. These factors are important in an urban tree's life. Their control usually depends on correcting the condition that caused the problem.

Environmental stress can be due to any of a number of problems. Both drought and excessive water can cause small yellow leaves. Frost cracks can occur as long vertical splits in the trunk when the tree is exposed to rapid temperature drops. Heavy foot or vehicular traffic can cause soil compaction. Under compacted conditions, roots cannot extract the needed mix of oxygen and water from the soil. Plants thus deprived will suffer from yellowed leaves, leaf loss and die-back.

Chemical injury commonly occurs as a salt injury or herbicide damage. Salt injury is a problem where de-icing salt is used on roadways or walkways. For areas that will be exposed to salt, salt tolerant trees should be used. Herbicide damage is common because of the herbicides ability to drift. Symptoms indicating herbicide damage include twisted and distorted leaves that turn brown and fall. Herbicide damage can be avoided by using careful applications of less volatile chemical formulations and only spraying on calm days.

Physical damage is common in the urban environment. Automobiles, vandals, livestock, lawn mowers, and rodents can all cause physical damage to a tree. Symptoms will vary but close examination of a tree will help to identify the problem.

# TREE PROBLEMS

## INSECTS

Insects cause problems in a number of different ways, including sucking, chewing, secreting and serving as carriers for diseases.

Sucking insects remove fluids and interior cell components leaving numerous small, discolored wounds in the leaves. Sucking insects, such as aphids, often secrete a sticky substance known as honeydew, upon which a black fungus called sooty mold often grows. The sooty mold does not attack the tree directly but grows on the honeydew residue. Neither the honeydew nor the sooty mold directly injure the plant, but are visually unappealing. Aphids may be controlled naturally with the introduction of ladybugs, their natural predator, or through the use of spraying a mixture of soapy water and vegetable oil.

Chewing insects remove all or part of the plant part upon which they are feeding. Ragged holes in the leaves may be the first clue that insects have invaded the plant.

Insects can also serve as carriers for diseases. An example is the Dutch elm disease. The disease is caused by a fungus that is spread through the feeding and breeding activity of the elm bark beetle. The beetles brush against the fungus on a diseased tree and the fly to a healthy tree. The fungi spores become established on the healthy tree. Even though the damage is caused by a fungus disease, it would not spread without the help of insects.

## DIAGNOSIS

Diagnosis of any plant problem relies on the following steps:

1. Identify the plant affected, both scientific and common names are needed to make an accurate diagnosis.
2. Carefully examine the problem area, how many and which trees are affected.
3. Determine the appearance of a typical affected plant, always compare a diseased plant with a healthy or normal plant.

4. Determine the primary symptoms, are leaves small and yellow, have galls developed or are some plant parts dead?
5. Look for other clues, are there trails of sawdust, fungi produce spores etc.
6. Isolate and identify the causal agent, a variety of problems can cause the same symptoms. Occasionally an affected plant part must be studied in a lab to determine the problem. The Cooperative Extension Office may also be able to assist in the determination of the problem.

## CONTROL

Disease control does not always mean chemical control. The four basic steps to cultural control:

1. Selection of trees. Avoid a tree that is susceptible to common problems. Consider temperature minimums and maximums, soil acidity and moisture levels when choosing a plant.
2. Proper planting procedures. Locate plants in a suitable site. Allowing proper spacing will help reduce excessive humidity, this reducing the risk of diseases that thrive in high humidity.
3. Routine maintenance. Remove diseased branches and shoots. Collect any diseased plant debris and dispose of it. Do not include it in a compost pile. Maintain proper levels of fertilization and irrigation. Some diseases attack succulent growth caused by excess fertilization while other diseases infect under fertilized plants.
4. Diversity of plantings. Diseases often infect a specific plant. Mixing species can slow disease spread and reduce insect problems.

When chemical controls are necessary, use the lowest toxicity level and only those chemicals specific for the problem. Consult a licensed, insured and bonded tree spraying service to determine the appropriate chemical response to a disease.



MANAGEMENT

## PARKS AND FORESTRY COMMISSION

The Parks and Forestry Commission was established to make recommendations to the City Council. The original Parks Commission was amended on August 8, 2002 to specifically address forestry functions. The Ordinance amending the Commission reads as follows:

ORDINANCE NO. \_\_\_\_\_

### AN ORDINANCE OF THE CITY OF COVINGTON, KING COUNTY, WASHINGTON, AMENDING THE PARKS COMMISSION TO INCLUDE FORESTRY FUNCTIONS.

WHEREAS, parks and other natural resources within the City are important assets for the community; and

WHEREAS, the City Council deems it appropriate to maintain a commission charged with assessing the needs of parks and forestry resources;

Now, therefore, the City Council of the City of Covington, King County, Washington do ordain as follows:

Section 1. Ordinance 02/01 is amended to read as follows:

2.45.010. Created. The Parks and Forestry Commission is hereby created and shall serve in an advisory capacity to the City Council.

2.45.020.Membership, terms, residence requirements.

A. Membership. The Parks and Forestry Commission shall consist of seven members, two of which may be youth under the age of eighteen, who shall be appointed by the City Council. Up to two of the members may reside outside the City, but those outside must reside within a three mile radius of the City limits.

B. Term of office. The term of office shall be for three years. When a vacancy occurs, the replacement shall be for the remainder of the unexpired term.

2.45.030. Organization and meetings. The Parks and Forestry Commission shall elect a chairperson, vice-chairperson and secretary from among its members. The secretary shall be responsible for taking and preparing Minutes of all meetings. Such individuals shall hold office for one year. The Parks Director shall provide staff assistance to the Commission as permitted by the budget. The Commission shall meet one (1) time per month and upon call of the chairperson, as necessary. Each regular and youth member shall have one vote.

2.45.040. Responsibilities. The Parks and Forestry Commission shall study, investigate, counsel and develop and/or update written plans for the development of parks and other natural resources within the City taking into consideration the requirements of all grant fund agencies. Further, the Commission shall be responsible for the following:

1. Preparation of a public involvement program that solicits volunteer support and encourages public participation in the implementation and operation of Covington's park system;
2. Preparing and/or reviewing the long range park, recreation and open space plan for the City of Covington;
3. Proposed land acquisitions, easements and leases;
4. Specific park master plans and related public involvement;
5. Partnership and intergovernmental agreements pertaining to park, recreation and natural resources;
6. Major policies related to the management and operation of the City's park and recreation system;
7. Long term funding and financing to implement and manage the City's park, recreation and natural resource system;

## PARKS AND FORESTRY COMMISSION

8. Preparation of a capital improvement plan that identifies funded priority projects;
9. Developing, implementing and reviewing a comprehensive community forestry program, including tree management and Arbor Day activities, and annual work plan;
10. The Parks and Forestry Commission shall submit written periodic reports to the City Council setting forth its progress in completing its work program for the current fiscal year. The Chairperson of the Parks and Forestry Commission or designee is encouraged to regularly present updates to the City Council at the first Regular City Council Meeting or Study Session after each Parks and Forestry Commission Meeting;
11. Such other and further responsibilities as may be assigned to the Commission by the City Council, from time to time.

Section 3. This ordinance shall be in full force and effect five days after passage, approval posting and publication as provided by law. A summary of this Ordinance may be published in lieu of publishing the ordinance in its entirety.

Section 4. If any provision of this ordinance, or ordinance modified by it is determined to be invalid or unenforceable for any reason, the remaining provision of this ordinance and ordinances and/or resolutions modified by it shall remain in force and effect.



## CITY TREE ORDINANCE

Municipal tree ordinances have become a standard part of an urban forestry program. The ordinance gives legal standing to an urban forestry program and helps it stand a better chance of funding. Covington is a unique community with its own concerns and interests. The Tree Ordinance reflects these specific concerns and interests and will help guide the community toward a successful program. The following is the Tree Ordinance adopted by the Covington City Council.

AN ORDINANCE OF THE CITY OF  
COVINGTON, KING COUNTY, WASHINGTON,  
AMENDING CHAPTER 21-99 OF THE  
COVINGTON MUNICIPAL CODE TO BE  
KNOWN AS "TREE PRESERVATION,  
PLANTING, AND MAINTENANCE ORDINANCE"

WHEREAS, the clearing and removal of trees and ground cover has the potential, if left unregulated, to cause significant environmental and aesthetic damage within the City; and

WHEREAS, the City of Covington is desirous of securing for its residents an attractive, safe, living environment and high quality of life; and

WHEREAS, the City of Covington recognizes the contribution of trees to the livability of the community; and

WHEREAS, the City of Covington is interested in protecting and improving the quality of its existing and future tree resources; now therefore

WHEREAS, the City Council deems it in the best interest of the health, safety and welfare of the citizens of the City to regulate, to the extent permitted by law, removal of trees and vegetation from real property within the City so as to avoid the environmental and create a more aesthetically pleasing living environment for all citizens

NOW, THEREFORE, the City Council of the City of Covington, King County, Washington, hereby ordains as follows:

1. Ordinance No. 21-99 is hereby amended as follows:

21A.17.010 Short Title.

This chapter shall be known and may be cited as the Tree Ordinance of the City of Covington.

21A.17.020 Purpose. The purpose of this ordinance is to establish regulations and procedures for the clearing, removal, planting, care, and maintenance of trees to protect public health, safety and welfare.

21A.17.030 Definitions. Unless otherwise clearly indicated by the context, certain words and phrases used in this chapter shall have the following meanings. Words used in the singular include the plural, and words used in the plural, include the singular. Words used in the masculine gender include the feminine.

"Administrator" means the Manager of the City of Covington or the Manager's duly authorized designee.

"Applicant" means the party who is applying for the permit pursuant to this chapter and is the owner of the property or if the party applying for the permit is not the owner, the application must include a notarized, signed authorization from the owner.

"Arborist" means an individual certified by the International Society of Arboriculture.

"Brushing" means the practice of removing significant ground cover to create better visibility on a site for purposes of, including but not limited to, marking or surveying.

"Caliper" is the American Association of Nurseryman standard for trunk measurement of nursery stock. Caliper of the trunk shall be the trunk diameter measured 6" above the ground for up to and including 4" caliper size and 12" above the ground for larger sizes.

"City" means the City of Covington, King County, Washington.

"Critical Root Zone" equals one-foot for every one-inch diameter of tree.

"DBH" means diameter at breast height. DBH is a tree's diameter in inches at 4-1/2 feet above the ground. On multitemmed or trunked trees, the diameter shall be the diameter equivalent to the sum of trunk areas measured at 4-1/2' above the ground.

## CITY TREE ORDINANCE

"Department" means the Department of Planning and Public Works for the city unless otherwise specified.

"Drip line" of a tree means an imaginary line on the ground created by the vertical projection of the foliage at its circumference

"Ground cover" means any type of vegetation this is normally terrestrial and shall include trees less than four inches in diameter measured approximately twenty-four inches above the ground level.

"Hazard Tree" means any tree with a significant structural defect, disease, or any combination of those which renders said tree subject to failure, creating a high risk of damage to persons or property

"Heritage Tree" means any tree, or grove of trees, that has historical significance to a person, place or event, has attained significant size in height, caliper or canopy spread for its age and species, is prominently visible to the public, has special aesthetic qualities for its species and is not a hazard or obstruction as set in Section 21A.17.240 of this ordinance.

"Imminent Danger" means a danger that is threatening to occur immediately, near at hand or impending.

"ISA" means International Society of Arboriculture.

"Landscape Architect" means an individual licensed by the American Society of Landscape Architects.

"Land clearing" or "clearing" means the direct and indirect removal of trees and/or ground cover, including pruning and limbing, from any public or private lands or public right-of-way, or utility easement, except land clearing shall not include the removal of ground cover only on lots with existing residential dwellings.

"Land Use Application" means an application, supplied by the Department, which must be completed and accompany the submittal packet for the desired development permit.

"Large Tree" means any mature tree which would reach a maximum height of more than fifty (50) feet with a maximum spread of over 35 feet.

"Major Pruning" means cutting back of limbs larger than one and one-half inches in diameter on street trees.

"Medium Tree" means any mature tree which would reach a maximum height of 25 to 49 feet with a maximum spread of 34 feet.

"Parks and Forestry Commission" means the named advisory commission who oversees the Community Forestry Program and reports to the City Council.

"Park Trees" means trees, shrubs, bushes and all other woody vegetation in public parks having individual names, and all areas owned by the city, or to which the public has free access.

"Person" means any individual, partnership, corporation, association, organization, cooperative, public or municipal corporation or agency of the state or local government, however designated.

"Significant Tree" means an existing deciduous or coniferous tree six inches or more in diameter measured four feet six inches above the adjacent grade, of any species suitable for inclusion as permanent landscaping in a project. This also includes unusual, historic, heritage or rare trees.

"Site" means any lot or parcel of land or contiguous combination thereof, on which activities subject to this chapter are performed or permitted.

"Small Tree" means any mature tree, which would reach a maximum height of 24 feet with a maximum spread of 24 feet.

"Street Trees" means trees, shrubs, bushes and all other woody vegetation on land lying within the public rights-of-way within the city.

"Stumps" means the lower portion of the tree up to a maximum height of four feet, that remains after the foliage, limbs, branches and the upper part of the trunk have been cut off.

"Structure" means that which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

## CITY TREE ORDINANCE

"Tree Appraisals" use the Trunk Formula Method of the Council of Tree and Landscape Appraisers.

"Tree harvesting" means felling, cutting, or taking of trees, standing or down, on privately or publicly owned land for sale or for commercial, industrial, or other use.

"Tree" means any woody plant characterized by one main stem or trunk and many branches, and having a diameter of four inches or more measured at twenty-four inches above the ground level.

"Tree Owner" means the owner of the real property which 51 percent or more of the trunk is located at ground level.

"Tree Topping" shall be herein defined as the severe cutting back of limbs to stubs larger than three inches in diameter within the tree's crown to such a degree so as to remove the normal canopy and disfigure the tree.

"Tree Tract" is a separate deeded tract of land, specifically set aside for the preservation and planting of trees. Stormwater retention/detention facilities, sensitive areas and other open space or common areas may be considered tree tracts if they currently support the growth of trees. The purpose of these areas for preserving and planting trees shall be stated on the face of the plat.

"Tree unit" is a unit of measurement based upon the size of the tree as set forth in Tables 1 and 2, in Section below 21A.17.130.(1)

"Vegetation" means any and all organic plant life growing at, below or above the soil surface

### 21A.17.040 Land Clearing Permit Required.

A. Unless exempted under Covington Municipal Code Section 21A.17.050, any person wishing to engage in land clearing within the City shall first obtain a land clearing permit from the Administrator pursuant to Section 21A.17.055 or Section 21A.17.070. A separate permit shall be required for each individual site on which the land clearing activity is proposed.

B. The permit required by this section shall be in addition to any other permit(s) which will or have been issued by the City or any other governmental agency with jurisdiction over all or part of the proposed activity. A land clearing permit may be combined with any other approved Engineering or Public Works permit(s), under this section.

21A.17.050 Exemptions. The following activities are exempt from the permit requirement of Section 21A.17.040 unless they cause an adverse impact including but not limited to, runoff and diversion, erosion, risk of landslide, and infiltration of pollution into groundwater, or adverse impacts to adjacent properties or is detrimental to the health of the trees or groundcover.

A. Emergency removal of a tree or ground cover in order to prevent imminent danger to persons or structures. Such removal shall be reported to the City;

B. Normal and routine maintenance of, and improvements to, existing landscaping on private property, but not to include utility easements and public right of ways; provided, that said maintenance does not create a hazard for any adjacent site or is detrimental to the health of the trees. This provision does not include those activities addressed in Section 21A.17.055 Minor Permit. The following activities are considered detrimental to the health of a tree.

i) The removal of 30% of the line crown in less than a 3-year period; and

ii) Trenching or digging to a depth of greater than one-foot within the critical root zone; and

iii) Tree topping.

C. Commercial and Wholesale nurseries.

21A.17.055 "Minor Permit". The Administrator in issuing minor permits shall obtain and maintain an inventory record of those granted. Unless the Administrator determines a full permit is necessary, the Administrator, may grant a minor permit pursuant to Section 21A.17.040 for the following;

## CITY TREE ORDINANCE

A. In a thirty-six consecutive month period, the removal of no more than five trees on a site, but not to exceed 20% of the total trees on any site of one acre or less. Each applicant is entitled to remove one tree per site in a thirty-six month period. For sites in excess of one acre, an additional one tree per additional acre may be removed, but not to exceed 20% of the total trees on the site. The Administrator may grant permission to remove additional trees if a replanting plan is approved.

The Minor Permit application shall include a sketch of existing trees on the site, identifying the type and designation of tree, to be removed if known, location of boundary lines and structures, and identification of the applicant.

B. Pruning for above-ground utility facilities requires the utility and its contractor to submit a written statement confirming:

1. No tree removal;
2. The actions planned will not cause significant structural defect to any tree; and
3. The time period and site location (s) for the minor permit sought.

21A.17.070 Land Clearing Permit - Application. The applicant for a land clearing permit shall submit a completed application plus two copies with the Administrator in conjunction with any land use application or building permit on the same site. The application shall be on a form furnished by the Administrator and shall include three sections: 1) a land clearing schematic, 2) a landscaping schematic and 3) a written report:

The application shall include the following information:

- A. The name, address and telephone number of the applicant;
- B. The legal description or tax lot parcel number, and street address of the site on which the proposed clearing activity is to be performed;
- C. For proposed land clearing activity, and landscaping or replanting activity, within areas near or including sensitive areas, such as: steep slopes, streams, shorelines, and wetlands, a

topography map showing contours at not greater than five foot intervals, as determined by a professional land surveyor;

D. The date on which the site plan was completed;

E. A north directional arrow and the engineer's scale to which the plan was drawn, as specified by the Administrator;

F. The location of existing and proposed improvements, if any, including but not limited to structures, roads, driveways, utilities and storm drainage facilities. The plan shall include a note that the proposed improvement locations shall be staked on-site to enable City staff to review those locations and their relationship to existing trees and ground cover;

G. The location, number, types of species, size and condition of existing trees and ground cover, a designation of heritage trees, if any, and a designation of any trees or groundcover proposed to be removed. The location and size of trees shall be shown on a survey prepared by a professional land surveyor. For existing vegetation being saved, provisions for protection thereof, as required by City Code 21A.17.130 G;

H. The location, number, types of species, and size of planting stock pursuant to the tree density requirements;

I. The location of all sensitive areas, proposed buffers, open space and other areas of the site on which trees and/or ground cover are to be saved;

J. Erosion and Sediment Control plans;

K. A statement explaining the purpose of the proposed land clearing activity;

L. A tree protection plan;

M. A proposed time schedule for land clearing, land restoration, and implementation of erosion control measures;

N. A discussion and calculations demonstrating that the conditions and standards set forth in Sections 21A.17.130 through 21A.17.140 are satisfied;

## CITY TREE ORDINANCE

P. A Bond Quantity Worksheet consistent with 21A.17.270; and

Q. Any other information which the Administrator, in the Administrator's discretion, deems necessary for an effective evaluation of the application.

21A.17.080 Land Clearing Permit - Application - Fee. The application fee for a land clearing permit is as established in Title 27

21A.17.100 Land Clearing Permit - Approval or denial.

A. Minor Permits and land clearing approvals are a Type I decision as defined in CMC;

B. The Administrator shall have the authority to approve, modify, approve with conditions or deny the permit in accordance with the intended purposes of this chapter as well as the standards and conditions set forth in Covington Municipal Code Sections 21A.17.130-21A.17.160. If the Administrator determines that the application complies with the criteria and standards set forth in this chapter, then the Administrator shall issue a land clearing permit to the applicant;

C. The permit granted hereunder shall be valid for 60 days;

D. The permit may be suspended or revoked by the Administrator if granted on the basis of inaccurate or misleading information or upon the violation of any provision of this chapter;

21A.17.130 Conditions and Standards General requirements.

Section 1. Unless otherwise approved by the Administrator pursuant to the minor permit and exemptions sections, all land clearing within the City shall conform to the following standards and conditions. In addition, the following minimum standards and provisions shall be the governing criteria for the issuance or denial of a land clearing permit under this chapter:

A. The clearing activity shall not significantly create or contribute to blowover, landslides, accelerated soil creep, settlement, subsidence or other hazards associated with strong ground motion and soil liquefaction;

B. The clearing activity shall not create or contribute to flooding, erosion or increased turbidity, siltation or other forms of pollution in any waters of the state;

C. The clearing activity shall be undertaken in such a manner as to preserve and enhance the City's aesthetic character. Vegetative screens or buffer strips shall be maintained or be reestablished in a timely manner, after clearing, with approved plantings along public rights-of-way and adjoining property boundaries, and subject to the financial security provisions of this ordinance;

D. Clearing operations and activity shall be conducted so as to expose the smallest practical area of soil to erosion for the least possible time, consistent with the anticipated build-out schedule;

E. Clearing operations and activity shall be conducted in accordance with all applicable city, state and federal regulations;

F. Those trees or ground cover designated for retention shall not be damaged by, for example, scarring, back filling with heavy soil, compaction of the soil around said tree or ground cover or by any other activity that causes damage to the roots, trunk or surrounding ground cover. Land clearing equipment and machinery shall at all times remain outside the critical root zone of any tree designated for retention, except where such area encompasses any road or constructed pathway. To assure protection of the root zone, visual marking of the critical root zone must be installed;

G. All land clearing activity shall conform with the protection measures required by the Administrator as a condition to issuance of the land clearing permit;

H. Timber harvesting and conversion of timbered lands within the urban growth area shall not be permitted until such time as a valid land use application for development is approved. If prior to tree harvesting, a lot owner has not received a permit for future conversion of the site, the city shall not accept application for development permit(s) for that site for a period of ten years. This condition is placed on the site, rather than the site owner;

# CITY TREE ORDINANCE

I. All sites shall comply with the minimum tree density requirements specified in Section 21A.17.130 Section 2;

## Section 2. Minimum Tree Density Requirements.

A. Minimum Tree Density Requirements Established. A minimum tree density of 30 tree units per acre is required on any cleared or altered site. The tree density may consist of existing trees, replacement trees or a combination of existing and replacement trees, pursuant to the priority established in Section 21A.17.130 Section 2 D;

B. All land clearing activities requiring a permit under 21A.17.070 shall comply with the Minimum tree density requirement;

C. Tree Density Calculation. For the purpose of calculating required minimum tree density, city right-of-way and areas to be dedicated as city right-of-way shall be excluded from the area used for calculation of tree density. Specific tree density calculations and replacement tree standards are delineated in the tables below;

Table 1. The required minimum tree density and replacement tree requirements for various activities.

### PROPOSED ACTIVITY

New development, commercial or residential greater than 4 units

### TREE REPLACMEENT REQUIREMENTS

30 tree units per acre

### REQUIRED MINIMUM TREE DENSITY

30 tree units per acre

### PROPOSED ACTIVITY

Developed commercial, industrial, multi-family

### TREE REPLACMEENT REQUIREMENTS

1 tree unit for every 500 sq. ft. disturbed and 3 tree units for every 1 tree unit proposed for removal up to required minimum tree density

### REQUIRED MINIMUM TREE DENSITY

30 tree units per acre

TABLE 2: The tree unit value that corresponds to existing trees.

| DBH    | TREE UNITS |
|--------|------------|
| 1"-6"  | 1          |
| 6"-12" | 1.5        |
| 14"    | 2          |
| 16"    | 3          |
| 18"    | 4          |
| 20"    | 5          |
| 22"    | 6          |
| 24"    | 8          |
| 26"    | 8          |
| 28"    | 9          |
| 30"    | 10         |
| 32"    | 11         |
| 34"    | 12         |
| 36"    | 13         |
| 38"    | 14         |
| 40"    | 15         |
| 42"    | 16         |
| 44"    | 17         |
| 46"    | 18         |
| 48"    | 19         |
| 50"    | 20         |

Table 3: The planting stock size requirements.

DEVELOPMENT TYPE—Residential/Commercial

TREE TYPE—Deciduous

REQUIRED MINIMUM SIZE—2" Caliper

TREE UNIT VALUE—1

DEVELOPMENT TYPE—Industrial

TREE TYPE—Conifer

REQUIRED MINIMUM SIZE—5-6' tall

TREE UNIT VALUE—1

D. Replacement Tree Location. The applicant's proposed location of transplanted or replacement trees shall be subject to city approval as part of the tree plan. Replacement trees should be planted according to the following priority:

## CITY TREE ORDINANCE

1) On-site, including tree tracts. A Homeowner's Association shall hold title to any designated tree tract unless held by the city. On residential developments greater than 4 lots, tree tracts are not discretionary.

2) Off-site. When room is unavailable for planting the required trees on-site, then they may be planted at another approved location in the city.

3) City Tree Account. When on-site and off-site locations are unavailable, then the applicant shall pay an amount of money equal to the current market value of the replacement trees and installation into the City's Tree Account.

E. Replacement Tree Planting Standards. Trees shall be planted pursuant to the following planting standards.

1) Replacement Tree Quality. Replacement trees shall be American Standard for Nursery Stock Grade No. 1 or better and must be approved by the City prior to planting.

2) Replacement Trees - Species and Spacing. The species selection and spacing of trees to be planted shall be such that it provides for the eventual mature size of the trees. Soil type, soil conditions and other site constraints shall be considered when selecting species for planting. Section 21A.17.140 provides a list of recommended and prohibited street and park trees.

3) Required cultural practices. Trees shall be watered as necessary to ensure establishment, survival and growth, during the first three growing seasons after planting. They shall be mulched with 4 inches deep of composted mulch. Staking shall be required as provided in city design construction standards numbers 525 and 526.

4) The spacing of Street Trees will be in accordance with the species size classes listed in Section X.21A.17X, and no trees may be planted closer together than the following: Small Trees, 30 feet; Medium Trees, 40 feet; and Large Trees, 50 feet; except in special plantings designed or approved by the Administrator.

5) No Street Tree other than those species listed as Small Trees may be planted under or within 10 lateral feet of any overhead utility wire, or over or within 5 lateral feet of any underground water line, sewer line, transmission liner or other utility.

6) The distance trees may be planted from curbs or curb lines and sidewalks will be in accordance with the size classes listed in Section 21A.17.140 and no trees may be planted closer to any curb or sidewalk than the following: Small Trees, 2 feet; Medium Trees, 3 feet; and Large Trees, 4 feet.

7) No Street Tree shall be planted closer than 10 feet from any street corner, measured from the point of the nearest intersecting curbs or curb lines as specified in Covington Design and Construction Standards #524. No Street Tree shall be planted closer than 10 feet of any fireplug.

### **21A.17.140 TREE SPECIES.**

The following is a list of recommended species for different locations. This is not a complete list. New varieties are discovered and made available at different times. Other trees may be substituted and used, if approved by the Administrator.

#### **Recommended Street Trees**

The following are considered **Small Street Trees**. Small Street Trees typically have a crown not exceeding 30 feet tall and a variable spreading habit. These are the only trees allowed where there are overhead utility lines.

Autumn Brilliance Serviceberry  
Sugar Tyme  
Globe Ash  
Frauter's Vesuvius Flowering Plum  
Newport Flowering Plum  
American Hornbeam  
Canada Red Chokecherry  
Kwanzan Oriental Cherry  
Paperback Maple  
Cherry Dogwood  
Japanese Hornbeam  
Persoon Parrotia  
Golden Desert Ash  
Prairiefire Crabapple  
Lavalle Hawthorne



## CITY TREE ORDINANCE

Medium Narrow Street Trees typically have a crown not exceeding 45 feet and with a narrow growing habit. The following trees are recommended where tall, narrow space is available in planting space not less than 5 feet wide.

Ananogawa Cherry  
Capital Flowering Pear  
Bowhall Red Maple  
Chanicleer Flowering Pear  
Cleveland Select Flowering Pear  
Pyramid Hornbeam  
Columnar Norway Maple  
Columnar Sargent Cherry  
Skyrocket English Oak  
Karpipck Maple

Medium Street Trees typically have a crown not exceeding 45 feet in height and a wider spreading habit. The following trees are recommended where tall, wide crown space is available in planting space not less than 5 feet wide.

Aristocrat Flowering Pear  
Autumn Blaze Flowering Pear  
Hedge Maple  
Worpleson Sweetgum  
American Hop-hornbeam  
Ginkgo Tree  
Autumn Flame Red Maple  
Crimson King Norway Maple  
European Hornbeam  
Green vase Japanese Zelkova  
Katsura Tree  
Sawtooth Oak  
Ruby Horsechestnut  
Whitebeam  
Raywood Ash  
Sour Gum  
Coliseum Maple  
Chinese Tuliptree  
American Yellowwood  
Kobus Magnolia

Large Street Trees typically have a crown exceeding 50 feet and a spreading habit. The following trees are recommended where the planting space is at least 6 feet wide.

Pin Oak  
Red Oak  
Tulip Tree  
Bur Oak  
Dawn Redwood

English Oak  
Bloodgood London Plane Tree

### **Recommended Park Trees**

Many of the above referenced Street Trees would also be appropriate to plant in developed park areas.

Grand Fir  
Bigleaf Maple  
Douglas Fir  
Western Red Cedar  
Western Hemlock  
Cascara  
Vine Maple  
Shore Pine  
Paper Birch  
Red Alder  
White Alder

### **Prohibited Street Trees**

Use of the following street trees within the street right-of-way is prohibited.

Box Elder  
Hemlock  
Silver Maple  
Spruce  
Weeping Willows  
Pine  
Fir  
Poplar  
Cedar  
Cottonwood  
Any fruit-bearing tree except ornamentals

### **21A.17.190 Pruning, Corner Clearance**

Every owner of any tree overhanging any street or right-of-way within the city shall prune the branches so that such branches shall not obstruct the light from any street lamp or obstruct the view of any street intersection and so that there shall be a clear space on ten (10) feet above the surface of the street or sidewalk. Said owners shall remove all dead, diseased or hazardous trees, or broken or decayed limbs which constitute a menace to the safety of the public. The city shall have the right to prune any tree or shrub on private property when it interferes with the proper spread of light from a street lamp or interferes with visibility of any traffic device or sign.

## CITY TREE ORDINANCE

### 21A.17.200 Dead or Diseased Tree Removal on Private Property

The City shall have the right to cause the removal of any dead or diseased trees on private property within the city when such trees constitute a hazard to life and property as recommended by an ISA certified arborist or harbor insects or diseases which constitute a potential threat other trees within the city. The City will notify the owners of such trees in writing. Removal shall be done by said owners at their own expense within sixty days after the date of service of notice. In the event of failure of owners to comply with such provisions, the city shall have the authority to remove such trees and charge the cost of removal on the owners property tax notice.

### 21A.17.210 Removal of Stumps

The area for stump removal is that which causes the surface of the ground to be higher than the adjacent grade. All stumps of street and park trees shall be removed a minimum of four (4") inches and a maximum of twelve (12") inches below the existing grade so the top of the stump shall not project above the surface of the ground. The hole or depression resulting from the removal work shall be filled with topsoil and made level with the existing grade.

### 21A.17.220 Public Tree Care

A) The city shall have the right to plant, prune, maintain or remove or cause to order to be removed any tree or part thereof which is in an unsafe condition or which by reason of its nature is injurious to persons, sewers, electric power lines, gas lines or water lines, or is affected by any injurious fungus or insect or to preserve or enhance the symmetry of trees.

B) Any tree or associated landscaping installed as a condition of approval or in accord with any development regulation or ordinance shall be the responsibility of the applicant, Home Owners Association or adjacent property, unless part of a funded City maintenance program. No required tree or associated landscaping may be removed or altered without the written approval of the Administrator.

C) General tree care to include, but not be limited to, the fertilization, aeration, pruning, planting, removal, insect and disease diagnosis and treatment shall be in accordance with American Standards for Nursery Stock specifications.

### 21A.17.230 Tree Topping

It shall be unlawful as a normal practice for any person, firm, or city department to top any street tree, park tree or other tree on public property. Trees severely damaged by storms or other causes, or certain trees under utility wires or other obstructions where other pruning practices are impractical may be exempted from this Ordinance at the determination of the Administrator.

### 21A.17.240 Heritage Trees

#### A. Heritage Tree Inventory.

1) The City shall develop an inventory of Heritage Trees that satisfy the criteria of this section. The initial inventory shall be the responsibility of the Parks and Forestry Commission. The City Council, Planning Commission, Parks and Forestry Commission, any Neighborhood/ Homeowners Association, a property owner, or any person may recommend to the City that a tree be designated a Heritage Tree.

2) The Heritage Tree designation may be applied to a tree or grove of trees.

3) The Parks and Forestry Commission shall hold at least one public hearing on the proposed designation (s). The City shall notify each property owner by certified or registered mail when a tree on the owner's property has been proposed for designation to the Heritage Tree Inventory. The notice and a response form shall be mailed at least 30 calendar days prior to the public hearing.

4) After the Commission completes its hearing, it shall establish a list of Heritage Trees based on the criteria found in this section. Decisions of the Parks and Forestry Commission may be appealed to the City Council by any aggrieved party.

## CITY TREE ORDINANCE

### B. Heritage Tree Selection Criteria.

For any individual tree or grove of trees to be listed as a Heritage Tree(s), it must be in an apparently healthy growing condition and one or more the following exist:

- 1) The tree has a d.b.h. of 24 inches or greater; or
- 2) The tree has a distinctive size, shape, or location, or is of a distinctive species or age which warrants a Heritage Tree status; or
- 3) The tree possesses exceptional beauty which warrants a Heritage Tree status; or
- 4) The tree is distinctive due to a functional or aesthetic relationship to a natural resource, such as trees located along stream banks or trees located along ridge lines;
- 5) The tree has a documented association with a historical figure, property, or significant historical event; or
- 6) The tree serves significant benefit for wildlife such as nesting, feeding.

### C. Heritage Grove Selection Criteria.

A grove may be considered for Heritage Grove Status if it is apparently in a healthy growing condition and one or more of the following criteria exists:

- 1) The grove is relatively mature and is of a rare or unusual nature containing trees that are distinctive either due to size, shape, species or age; or
- 2) The grove is distinctive due to a functional or aesthetic relationship to a natural resource, such as trees located along stream banks, or trees located along ridge lines;
- 3) The grove has documented association with a historical figure, property, or significant historical event; or
- 4) The grove serves significant benefit for wildlife such as nesting, feeding.

### D. Heritage Trees Development Review

1) When development is proposed for property which contains a Heritage Tree, and the Administrator determines that the proposed development may affect a Heritage Tree, the property owner must have a tree preservation plan prepared by a ISA certified arborist demonstrating how the Heritage Tree will be protected and preserved. A Heritage Tree shall be preserved unless the Parks and Forestry Commission determines that the tree may be removed based on the criteria for Heritage Tree removal found in Section D(1).

2) A tree preservation plan shall be composed of the following:

a. A site plan indicating the location of Heritage Trees.

b. The methods to be used to preserve the Heritage Trees.

c. If a Heritage Tree is proposed for removal, a narrative statement outlining the reasons why the Heritage Tree should be removed.

d. A mitigation plan indicating the replacement trees or additional new trees to be placed on the site. The mitigation plan should demonstrate, to the extent possible, that the character of the site will not substantially change as the result of development.

3) Site design adjustments may be allowed in some cases, as follows:

a. The City Council may grant a variance to front, side, and/or rear yard setback standards by up to 20 percent to retain a Heritage Tree(s). The adjustment shall be the minimum necessary to accomplish preservation of trees on site and shall not conflict with the Uniform Building Code or other adopted ordinances or conditions placed on the property.

## CITY TREE ORDINANCE

b. The City Council may grant a 10 percent variance to the lot size and/or a ten percent variance to the lot width and/or lot depth standards in approving a short plat or other land division if necessary to retain Heritage Tree(s). The Administrator may accept a preliminary plat application and recommend approval to the hearing body of a plat which provides for similar variance to lot size, width and depth standards if necessary to retain Heritage Trees.

### D. Removal of a Heritage Tree

1) No person may cut or remove a Heritage Tree without obtaining approval from the Parks and Forestry Commission. The tree removal permit shall be approved if one of the criteria is satisfied:

a. Retention of the tree would make reasonable use of the property allowed under the current zoning impractical or impossible in that the development would not be allowed to meet the maximum density allowed by the applicable zoning or would require special design features that would significantly increase the cost of development by 5 percent or more.

b. The removal is necessary to accommodate a new improvement, structure or remodeled structure, and no alternative exists for relocation of the improvement on the site, or that variances to setback provisions will not allow the tree to be saved or will cause other undesirable circumstances on the site or adjacent properties.

c. The tree is hazardous, diseased or storm damaged and poses an imminent threat to the health, safety or welfare of the public.

d. The tree has lost its importance as a Heritage Tree due to damage from natural or accidental causes, or is no longer of historic or natural significance.

e. The tree needs to be removed to accomplish a public purpose and no practical alternative exists.

### E) Heritage Tree Pruning

1) The limb structure, or crown, of a Heritage Tree may be pruned in any one year period without obtaining approval from the Parks and

Forestry Commission, provided that at least 80 percent of the existing tree crown remains undisturbed.

2) Any person who wishes to prune a Heritage Tree in excess of 20 percent of the existing crown shall obtain approval from the Parks and Forestry Commission subject to the following conditions:

3) The protected tree shall be pruned following acceptable arboricultural standards.

4) The tree shall be pruned in a manner which ensures safety to public and private property and shall be done by a ISA arborist.

21A.17.250 Any New Structures When required for construction of a Residential or Commercial/Industrial structure, removal of trees and/or ground cover within an area beyond 25 feet from the perimeter of the building line and beyond 15 feet from the perimeter of any area proposed to be cleared for a driveway or septic tank drainfield system shall not be allowed; provided, that the Administrator may, in the Administrator's discretion, require minor modifications to the siting and placement of driveways, utilities and septic tank drainfield systems, as indicated on the plot plan, where such modifications are reasonably necessary to promote the purposes of this chapter and will not unreasonably impair the function of the improvement; provided, however, the tree and ground cover removal shall: a) not cause siltation or other forms of pollution to any waters of the state; and b) shall comply with minimum tree density requirements.

### 21A.17.260 Conditions and Standards - Subdivision and short plats.

A. No clearing of trees and/or ground cover in conjunction with city approval of a subdivision or short plat of real property shall commence until preliminary short plat or preliminary plat approval has been granted. Land clearing review shall be combined with an approved grading plan and issued by the Administrator.

B. All tree removal and brushing on lots or in open space areas of a preliminary short plat or a preliminary plat shall be conducted in compliance with 21A.17.250.

## CITY TREE ORDINANCE

### 21A.17.270 Financial Security.

A. Prior to the issuance of a land clearing permit pursuant to 21A.17.070, the applicant shall post with the City a bond in the amount of one hundred fifty percent of the estimated cost of replanting consistent with the Tree Density requirements, but in any event not less than \$1,000.00. Said bond shall be executed by the owner and/or applicant and a corporate surety authorized to do business in the State of Washington as a surety. All bonds shall be in a form approved by the City Attorney and shall include penalty provisions consistent with the Chapter for failure to comply with the conditions of the permit. At the Administrator's discretion, the Administrator may allow or require the applicant to deposit cash with the City in lieu of a bond.

B. The City shall withhold issuance of a land clearing permit until the required bond is approved by the City Attorney and filed with the City. The City may enforce said bonds according to their terms and pursuant to any and all legal and equitable remedies.

C. The security shall be released pursuant to the following timeline and distribution: eighty percent (80%) after three (3) years, with a twenty percent (20%) holdback for an additional two (2) years to assure survival of the replanted trees.

### 21A.17.290 Violation - Penalty.

A. Failure to comply with any requirement of this chapter, including the conditions and standards set forth in Covington Municipal Code Sections 21A.17.130 - 21A.17.140, or with the terms or conditions of any land clearing permit shall constitute a violation of this chapter. Any person who violates this chapter shall be guilty of a misdemeanor. Each day said violation continues shall be considered a separate and distinct offense.

B. Any person who commits, participates in, assists or maintains such violation of this chapter shall also be guilty of a misdemeanor and shall be prohibited from conducting land clearing activities for a period of five (5) years.

C. Any private forester, contractor or heavy equipment operator engaged in land clearing activity shall be jointly and severally liable with the landowner for any violation of this chapter and for any mitigation required under Covington Municipal Code Section 21A.17.300.

D. The City is authorized to confiscate trees cut and/or cleared by a landowner and/or a contractor in violation of any provision of this chapter to utilize any other available legal means to enforce the provisions of this chapter. Any liquidation of the trees shall result in funds being applied to mitigation including any costs associated with the confiscation, assessing environmental damage and restoring the site. Any excess funds shall be returned to the property owner. Fresh cut stumps and/or fresh cut trees shall constitute evidence of tree removal subject to the provisions of this chapter.

### 21A.17.300 Violation - Mitigation.

In addition to the penalty set forth in Covington Municipal Code Section 21A.17.290, any person who violates the provisions of this chapter shall be liable to the City for the environmental damage caused thereby and shall be required to mitigate any such damage.

A. In assessing the environmental damage resulting from a violation of this chapter, the Administrator shall determine the amount and value of the trees and/or ground cover improperly removed or damaged, the cost of replacing said trees and vegetation and the extent and value of any other environmental damage occasioned by any violation of this chapter. To determine those values, the Administrator shall utilize the recommendations of the International Society of Arboriculture as well as the provisions set forth in section 21A.17.130-140.

B. In assessing the environmental damage resulting from a violation of this chapter, a certified arborist shall prepare and submit to the Administrator a report describing the likely condition of the site had the land clearing activities been conducted in compliance with the requirements of this chapter.

C. If a violation of this chapter is discovered

## CITY TREE ORDINANCE

after the evidence of such has been removed, the Administrator shall use whatever resources are immediately available to determine environmental damage. Said resources may include, but are not limited to, aerial photographs, photographs, interviews with adjacent property owners, receipts of timber sales relating to the site, and any other records available that may indicate the quantity, identity or quality of the trees and/or ground cover removed or the environmental damage sustained.

D. The Administrator may also estimate the probable worth of trees and/or ground cover removed by analyzing the best case growing capability of the site, taking into consideration the soil conditions, the health of surrounding tree stands and the type of species believed to have been removed.

E. Under no circumstances shall the environmental damage be less than cost of planting and maintenance needed to comply with the minimum Tree Density requirements.

### 21A.17.320 Violation - Mitigation - Restoration Plan.

A. When the Administrator has determined the value of the environmental damage occasioned by a violation of this chapter, the Administrator shall have a comprehensive plan prepared for the restoration of the site which shall include a time schedule for compliance. The cost of preparing such plan shall be assessed against the violator. Said plan shall provide for the rehabilitation of the site and shall provide for the installation of new trees and/or ground cover whose value is commensurate to the value of the environmental damage and shall comply with the Tree Density requirements. The plan shall reflect the purposes of this chapter as well as the factors and requirements set forth in Covington Municipal Code Sections 21A.17.130 - 21A.17.140. Plan preparation costs shall be borne by the applicant and/or the property owner.

B. If the Administrator determines that the cost of restoring the site is less than the value of environmental damage occasioned to the site, then the balance shall be paid by the violator to the City and deposited into the City Tree Account. The City shall utilize said funds for planting trees,

shrubs or other native vegetation in other areas of the City.

C. Within the time established in the plan for completion of the mitigation, the applicant and/or property owner shall complete the restoration required therein, including but not limited to, purchasing, installing and maintaining the new trees and/or ground cover.

D. In the event the violator does not timely implement the restoration plan, the City shall implement the plan by utilizing city employees or by employing a private contractor. Upon completion of said work, the costs thereof, plus interest at the then highest allowable legal rate, shall be due and owing to the City from the violator and the surety, if any, as a joint and several liability. In addition, the City may seek restitution from the violator through liens or any other available legal means. In the event the City is required to bring suit or consult with an attorney to enforce the bonds or to collect the costs referred to herein, the violator and the surety shall be jointly and severally responsible for any costs and attorney's fees incurred by the City.

### 21A.17.330 Violation - Mitigation - Appeal.

A. The Administrator's valuation of the environmental damage to a site may be appealed to the City hearings within 14 days of the date of the Directors decision.

B. If the appeal is timely filed, the hearings examiner shall determine if the Administrator's valuation accurately reflects the criteria set forth in Covington Municipal Code Section 21A.17.020. In addition, the hearings examiner may consider any other matters determined by the examiner to be relevant to the issues on appeal.

C. The hearings examiner may modify the Administrator's valuation of environmental damage based on the following criteria:

1. Whether the violation involved tree removal for monetary gain;
2. Whether the appellant has previously violated or intentionally violated the provisions of this chapter;

## CITY TREE ORDINANCE

3. Whether the Administrator's valuation of environmental damage substantially exceeds or understates the actual cost of restoring the site by implementation of the restoration plan described in Covington Municipal Code Section 21A.17.210; and

4. Whether the violation was intended or in reckless disregard of the provisions of this chapter;

5. The hearings examiner shall not reduce the Administrator's valuation of environmental damage if said amount does not exceed the actual cost of restoring the site pursuant to said restoration plan.

D. If the hearings examiner determines that the Administrator's valuation of environmental damage should be reduced, then the examiner shall compute the amount of said reduction based upon the following factors:

1. Whether the appellant voluntarily cooperated with the City's efforts to view the site and restore the site;

2. Whether the appellant demonstrated due diligence and/or substantial progress in implementing the site restoration plan;

3. Whether the appellant has presented a genuine issue pertaining to the interpretation of any provision of this chapter; and

4. Any other matters the hearings examiner deems relevant to this issue.

5. In no case shall the reduced compensation be lower than the commercial value of the removed trees and/or ground cover, or lower than the costs to comply with the Tree Density requirements.

21A.17.340 Foresters and Contractors Performing Land Clearing Activity.

A. In order to ensure compliance with the provisions of this chapter, private foresters, contractors and heavy equipment operators performing land clearing in the City shall be required to sign and submit to the City the "Statement of Tree and Vegetation Protection and Preservation Acknowledgment" set forth in this section. This statement shall be required as a

condition to issuing said person any other license required under the Covington Municipal Code.

B. Said statement shall be in substantially the following form:

"I \_\_\_\_\_, a duly licensed professional contractor, Contractor Registration No. \_\_\_\_\_, in the State of Washington, or professional forester, hereby attest that I have read and am knowledgeable of Ordinance No. \_\_\_\_\_, "Tree and Vegetation Protection and Preservation", of the City of Covington."

"I further attest that, as a professional doing land clearing work in the City of Covington, I am accountable for following the City's tree and vegetation protection and conservation requirements, including obtaining a land clearing permit or exemption prior to performing land clearing work, as defined by Chapter 21A.17.030, of that ordinance, as well as following all conditions and requirements of said permit or exemption.

"I attest that if I fail to follow tree protection requirements I will be held jointly responsible with the landowner for any restitution required as a result of environmental damage determined by the Administrator to be the result of improper land clearing activities at the site. This may result in claims against my bond pursuant to Section 18.27.040 of the Revised Code of Washington and other monetary penalties as allowed by this Chapter or State Law."

C. Any person subject to the provisions of this section who does not sign and submit the statement set forth in subsection B above shall be prohibited from performing land clearing activity within the City for a period of five years. Said persons who perform land clearing activity without submitting the required statement shall be guilty of a violation of this chapter.

21A.17.350 Penalty

Violation of this Ordinance is a gross misdemeanor punishable by a fine of not more than One Thousand Dollars (\$1,000) and a jail term of not more than one (1) year. Each day that such violation is allowed to continue shall be considered a separate and additional violation of this Ordinance.



## ARBOR DAY

Over a century ago, J. Sterling Morton recognized the importance of trees by setting aside a day that celebrated the planting of trees. The first Arbor Day was established in 1872 by the Nebraska Board of Agriculture. Arbor Day and Arbor Month celebrations now take place across the United States as well as in many countries around the world. To bring awareness to the use of trees during the holiday season, the City of Covington proclaimed December 3, 2002 as its first Arbor Day.

An Arbor Day celebration can be a highly visible public event. Many residents become aware of public trees when something negative has happened to the trees, such as inappropriate pruning or sudden removal. An Arbor Day celebration emphasizes a positive effort.

Involving community leaders and local businesses early in the planning stages of an Arbor Day activity can provide early community support and word of mouth publicity.

Arbor Day activities are often targeted at children. In addition to tapping their natural enthusiasm for living things, these activities give children early exposure to the importance of trees. Tree planting and tree care demonstrations teach children techniques that stay with them throughout their life. Better informed adults make better informed decisions concerning trees.

The list of potential Arbor Day activities is unlimited. Many communities included some type of program to officially recognize Arbor Day. A typical Arbor Day program includes the following:

1. Welcome by a local dignitary or civic leader.
2. A brief Arbor Day history.
3. Reading of the Arbor Day proclamation by the Mayor.
4. Poem, song, or selected reading about trees.
5. Planting of a ceremonial tree.
6. Demonstration of proper watering and care techniques.
7. Closing remarks and refreshments.

In addition to the symbolic planting of a few trees, Arbor Day serves to make everyone tree-conscious throughout the year. Theodore Roosevelt said, "A people without children would face a hopeless future; a country without trees is almost as hopeless."

An excellent source of information and ideas is the National Arbor Day Foundation. The web site address is: <http://www.arborday.org/>.



## LIVING MEMORIAL TREE PROGRAM

The City of Covington Living Memorial Tree Program was established in 2003 as a way to commemorate a special date such as a birthday or anniversary, honor a person, event or organization and have a tree planted in a local park.

A Living Memorial Tree is not only a gift for today but also a lasting contribution to the beauty and variety of the park landscape. It can help clean the air, control erosion, ease noise pollution and provide a safe haven for wildlife. A tree spreads its strength and beauty over the years, just as families grow and flourish for generations.

Persons wishing to participate in this program complete a request form and return it to the City of Covington Parks Department.

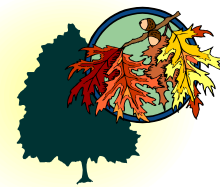
Department staff will contact with the person to consult on preferred tree species, potential locations and cost. The living Memorial will then be planted at the chosen site during the earliest possible season in which the tree's species can be planted most successfully.

Tree memorial donations are identified with a personalized brass leaf plate, as part of the proposed Living Memorial Tree display at the Parks Department offices.

Participants will also receive a certificate from the Covington Parks and Community Services Department commemorating the living memorial and a map showing the general location of the tree.

The tree will be identified in the park with a 4 inch by 6 inch brass marker installed near the base of the tree. The marker will designate the memorial and both the common and botanical names of the tree to add to the City Arboretum.

Living Memorial Trees are purchased from local nurseries. The price of the tree is dependent upon the type and size selected and market changes. The price range is generally \$100 to \$250 and includes the planting, site preparation and memorial marker. The following categories of trees may be selected:

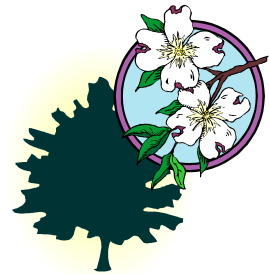


### Shade Trees

These trees provide large canopies, and usually reach or exceed heights of 50 feet. Planted size 1 1/2 inch to 2 1/2 inch trunk diameter, 18 to 15 feet high. Price range: \$100 to \$250.

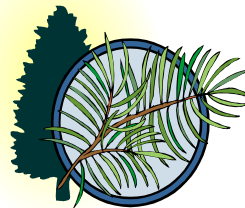
### Ornamental Trees

These trees generally exhibit interesting branching habits and features of unique foliage. They range in height from 20 to 50 feet. Planted size 1 1/2 inch to 2 1/2 inch trunk diameter, 8 to 15 feet high. Price range: \$125 to \$225.



### Evergreen Trees

These trees have needle-like or scale-like leaves, which remain on most species year round, and are pyramid shaped. They grow to a height exceeding 50 feet. Planted size ranges from 5 to 8 feet high. Price range:



\$100 to \$250.

## TREE CITY USA

Every community, regardless of size, benefits in different ways from being a Tree City USA. Reports of these benefits have reached The National Arbor Day Foundation through the years and are summarized below in six general categories:

### **Framework for Action**

Meeting the four standards for becoming a Tree City USA provides initial direction for an urban or community forestry program. Like the first rungs on a ladder, the standards help get a community started toward annual, systematic management of its tree resources. The four standards are as follows:

#### **A Tree Board or Department**

Someone must be legally responsible for the care and management of the community's trees. This may be a professional forester or arborist, an entire forestry department, or a volunteer tree board. Often, both a professional staff and advisory tree board are present, which is a good goal for most communities. A tree board, or commission, is a group of concerned volunteer citizens charged by ordinance with developing and administering a comprehensive tree management program. Balanced, broad-based community involvement is encouraged. Boards function best if not composed entirely of tree-related professionals such as forestry professors, nursery operators, arborists, etc. Fresh ideas and different perspectives are added by citizens with an interest in trees that is entirely avocational. Limited, staggered terms of service will prevent stagnation or burnout, while at the same time assuring continuity.

#### **A Tree Care Ordinance**

The tree ordinance must designate the establishment of a tree board or forestry department and give this body the responsibility for writing and implementing an annual community forestry work plan. Beyond that, the ordinance should be flexible enough to fit the needs and circumstances of the particular community. A tree ordinance provides an opportunity to set good policy and back it with the force of law when necessary. Ideally, it will provide clear guidance for planting, maintaining and removing trees from streets, parks and other public places.

#### **A Community Forestry Program With An Annual Budget Of At Least \$2 Per Capita**

Evidence is required that the community has established a community forestry program that is supported by an annual budget of at least \$2 per capita. At first, this may seem like an impossible barrier to some communities. However, a little investigation usually reveals that more than this amount is already being spent by the municipality on its trees. If not, this may signal serious neglect that will cost far more in the long run. In such a case, working toward Tree City USA recognition can be used to re-examine the community's budget priorities and re-direct funds to properly care for its tree resource before it is too late. Ideally, this standard will be met by focusing funding on an annual work plan developed after an inventory is completed and a report is approved by the city council. Such a plan will address species diversity, planting needs, hazardous trees, insect and disease problems and a pattern of regular care such as pruning and watering.

#### **An Arbor Day Observance and Proclamation**

This is the least challenging and probably the most enjoyable standard to accomplish. An Arbor Day celebration can be simple and brief or an all-day or all-week observation. It can be a simple tree planting event or an award ceremony that honors leading tree planters. For children, Arbor Day may be their only exposure to the green world or a springboard to discussions about the complex issue of environmental quality. The benefits of Arbor Day go far beyond the shade and beauty of new trees for the next generation. Arbor Day is a golden opportunity for publicity and to educate homeowners about proper tree care. Utility companies can join in to promote planting small trees beneath power lines or being careful when digging. Smokey Bear's fire prevention messages can be worked into the event, as can conservation education about soil erosion or the need to protect wildlife habitat. Still another way to develop Arbor Day is to link it with a tree-related festival.

#### **Education**

Education begins with discussion of the standards and getting organized to apply for Tree City USA status. It continues as the desire for Tree City USA recognition leads to contacts with the state forester's staff. In turn, this can set in motion aid from a variety of professionals in the form of technical advice, literature, films, and other assistance.

### **Public Image**

A community's public image is a very real phenomenon and important in many ways. Being a Tree City USA helps present the kind of image that most citizens want to have for the place they live or conduct business. The Tree City USA signs at community entrances tell visitors that here is a community that cares about its environment. It is also an indication to prospective businesses that the quality of life may be better here. It has even been known to be a factor in where meetings or conferences have been held. This reason alone caused a motel owner to start action for his community to join the network!

### **Citizen Pride**

Pride is sometimes a less tangible benefit. Gaining and retaining Tree City USA recognition is an award to the tree workers, managers, volunteers, tree board members and others who work on behalf of better care of a community's trees. Non-involved citizens, too, often share a sense of pride that theirs is a Tree City USA. This may translate to better care of trees on private property or a willingness to volunteer in the future.

### **Financial Assistance**

Preference is sometimes given to Tree City USA communities over other communities when allocations of grant money are made for trees or forestry programs. The reason is that there are invariably more requests than available funds when grants are available through state or federal agencies. If requests are equally worthy, some officials tend to have more confidence in communities that have demonstrated the foresight of becoming a Tree City USA.

### **Publicity**

Presentation of the Tree City USA award and the celebration of Arbor Day offer excellent publicity opportunities. This results not only in satisfaction for the individuals involved and their families, but also provides one more way to reach large numbers of people with information about tree care.



**TREE CITY USA.**

## WILDLIFE

Public interest in establishing wildlife in the urban environment is increasing. Opening urban lands to wildlife can transform a sterile plot into a vital habitat.

There are four considerations when planting to increase wildlife appeal in the garden: food, water, shelter and space. Collectively, these components are called habitat. Specific habitat requirements vary by species but all species need all four components to some degree.

Food is a prime concern of wildlife in urban areas. Often, the native vegetation has been removed and the plants that are planted are seedless forms that create less debris but do little for wildlife. With careful planning, though, food can be made available. Overlapping flowering and fruiting times offer a consistent source of food for wildlife. Gaps may be supplemented with birdseed.

Wildlife species need water in "dome" form. This can be supplied by a traditional bird bath or an in-ground water area. In addition to its wildlife value, a water feature can be a strong focal point in the landscape.

Shelter is essential for protection from predators, nesting and resting. Different species have different shelter requirements. Some birds and small mammals may prefer dense understory growth while others prefer evergreens.

Closely aligned with shelter is space. This concept is especially important for reproduction. Animals and birds need room during the breeding season. A bird may require a larger territory during that season, but once the season ends the territorial defense ends and other species may enter the area.

A recommended planting is one that includes multilayered vegetation with a diversity of plant species. This type of planting attracts more wildlife species than monocultures of tall trees or grass. Native species are best because most have passed the test of time for ecological stability and the native wildlife is adapted to using them.

By being aware of the specific needs of the species being attracted and by meeting those basic needs, a sterile urban plot can be turned into a mini-wildlife refuge.

## WETLAND PROTECTION

Wetland and riparian areas provide important fish and wildlife habitat, and protect water quality. These areas are not always obvious, but landowners still need to identify and protect them.

Wet soils, high water table levels, and the presence of water-tolerant plants typically characterize wetland and riparian areas. Soils in these areas absorb water during the wet seasons and then slowly release it. This helps regulate the water level during times of high water and seasonal low flows.

The areas around wetlands and stream filter surface runoff, blocking sediment and other debris from entering the water. Sediment entering the water can suffocate aquatic insects and plants, and can fill in fish resting pools and spawning grounds.

After timber harvest, trees and other vegetation must remain as a buffer along fish bearing streams and most wetlands to protect water quality, and to provide fish and wildlife habitat. Trees that keep vegetated buffers provide:

- o Shade and cool water needed by fish and aquatic species during summer months.
- o Filters to minimize silt entering water.
- o Logs and organic material in streams crucial for fish habitat.
- o Wildlife habitat protection.

Large tree harvesting along creeks or other large bodies of water may be subject to the Shoreline Management Act. In these instances removal of trees may be prohibited within 150 feet of the water. Additionally, a wetland management zone is required for properties with any of the following:

Type A wetland: An area of 1/2 acre or more that is covered by open water seven consecutive days between April 1 and October 1

Type B wetland: An open area of 1/4 acre or more that is vegetated with water tolerant plants and /or shrubs.

Type A or B wetland: Forested and non-forested marshes, bogs, swamps, or areas with much like soils, larger than 1/4 acre.

Wetland management zones have variable widths based on the size and type of wetland. Boundaries are measured out from the edge of the wetland. The forest practices rules establish leave tree requirements per acre.

Depending upon the specific site, it may be necessary to include one or all of the following entities to determine the action on a given site: The Department of Natural Resources, Army Corps of Engineers, Department of Ecology, and Department of Fish and Wildlife.

## UTILITIES

Most power outages in the Northwest are caused by trees. Trees blown against power lines by the wind. Limbs growing into power lines and causing shorts. Branches weighted down by snow and ice, pulling power lines down with them.

Tree-related outages tend to last longer than other outages, because they are often hard to locate and precarious to repair. Downed wires and fires caused by trees burning in power lines can have serious safety consequences.

Northwest utilities routinely prune and remove trees to reduce this risk. They typically operate on a three to five year cycle.

Pruning and removal operations involve specialized work. When the trees are already too close to power lines, the work is even more complicated. Public safety regulations require that only qualified line-clearance tree workers be used when working within ten feet of power lines. Lines can sometimes be de-energized; sometimes protective devices may be used. It may be possible to eliminate the electrical hazard by removing the portion of the tree in conflict with the line first, then completing the rest of the work.

As new development occurs the nature of the landscape changes. Capital improvement projects and private developments regularly make provisions for landscape plantings. Selecting the right species of trees for the site at planting time can dramatically reduce potential maintenance problems in the future. A list of recommended species for the City of Covington may be found in the Trees Section of this plan. The regions utilities have also published reference manuals to help in the placement of trees.

A second concern is with underground utilities. Trees with invasive roots often find their way into water and sewer systems, causing clogs and structural damage to pipes. These roots may go undetected for many years until a line becomes nonfunctioning. In instances such as this lines may need to be replaced or the roots removed from the system. In the event of new plantings are being installed plants should be selected with non invasive roots. A locate should be conducted a minimum of two working days prior to the planting of trees to identify any underground utilities. Locates are performed by a locating service and are free of charge. The color of paint used indicates the type of utility.

|        |   |                          |
|--------|---|--------------------------|
| Red    | = | Electric                 |
| Yellow | = | Gas & Oil                |
| Orange | = | Cable TV & Communication |
| Blue   | = | Water                    |
| Green  | = | Sewer                    |
| Pink   | = | Temporary Survey         |
| White  | = | Proposed Excavation      |

The number of the call before you dig service is 1-800-424-5555.



TREES



## COMMON NAME

*Scientific name*

### SIZE AND RATE OF GROWTH

The size and average mature size. Rate of growth is divided into three categories, slow – less than a foot of growth per year; moderate – one to two feet of growth per year; Fast – more than two feet of growth per year. Many factors influence size and growth rate. Individual trees will vary.

### ORNAMENTAL FEATURES

Aspects of growth if the tree that provide aesthetic interest are listed.

### USE

Locations for the establishment of the plant are suggested. The most common usage on public lands, e.g. street trees , lawn specimen and foundation plantings are emphasized.

### CULTURE

Factors influencing the successful establishment of the plant are included in this section. Light requirements, soil, urban environment, ease of transplanting and other factors contributing to the plant's growth are included.

### DROUGHT TOLERANCE

The irrigation needs of mature plants are the concern of this section as it is recognized that new plants require regular watering. Poor – needs irrigation, Fair – will need irrigation during dry periods, Moderate – may or may not need irrigation depending upon the length of the dry period, Good – will need irrigation if the dry period is extended, Very good – will not need irrigation.

### PRUNING

Pruning concerns that are specific to the individual plants are included.

### INSECTS AND DISEASES

The most frequent problems that may be encountered are listed.

### MAINTENANCE ISSUES

Any additional information that is pertinent to the maintenance of the plant is noted.

### NATIVE RANGE

The natural distribution of a plant gives clues to the plants adaptation t the local climate.

## AMERICAN HORNBEAM

*Carpinus caroliniana*

### SIZE AND RATE OF GROWTH

Moderate growth from 25 to 35 feet.

### ORNAMENTAL FEATURES

Round headed tree. Bark is smooth and gray. Dark green leaves are 1 to 3 inches long with toothed edges. In fall the leaves turn molted yellow and red. It has fruit clusters which are 1 1/2 to 4 inches long.

### USE

Lawn specimen, good for wildlife. Can use as street trees, but fruit may be messy.

### CULTURE

Plant in full sun.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

Prune when dormant to maintain shape.

### INSECTS AND DISEASES

Hardy.

### MAINTENANCE ISSUES

Small hard fruit.

### NATIVE RANGE

Central United States.

## FLOWERING PLUM

*Prunus spp.*

### SIZE AND RATE OF GROWTH

Varies depending upon species. Generally grow to 30 feet.

### ORNAMENTAL FEATURES

Planted for attractive flowers in the spring and as smaller shade trees. Leaf color varies. Leaves generally oval 1 to 2 inches in size.

### USE

Use as lawn specimens in groups or as street trees. Good for wildlife.

### CULTURE

Requires well draining, well aerated soil. Plant in full sun.

### DROUGHT TOLERANCE

Best with occasional summer water.

### PRUNING

Prune as little as possible. Remove crossing branches while tree is in bloom.

### INSECTS AND DISEASES

Slugs, caterpillars, root rot.

### MAINTENANCE ISSUES

May require spraying to eliminate pests. Fruit may be messy.

### NATIVE RANGE

Depends upon species.

## FLOWERING CHERRY

*Prunus spp.*

### SIZE AND RATE OF GROWTH

Varies depending upon species. Generally grow to 30 feet.

### ORNAMENTAL FEATURES

Planted for attractive flowers in the spring and as smaller shade trees.

### USE

Use as lawn specimens in groups or as street trees. Good for wildlife.

### CULTURE

Requires well draining, well aerated soil. Plant in full sun.

### DROUGHT TOLERANCE

Best with occasional summer water.

### PRUNING

Prune as little as possible. Remove crossing branches while tree is in bloom.

### INSECTS AND DISEASES

Slugs, caterpillars, root rot.

### MAINTENANCE ISSUES

May require spraying to eliminate pests. Fruit may be messy.

### NATIVE RANGE

Depends upon species.

## PAPERBACK MAPLE

*Acer griseum*

### SIZE AND RATE OF GROWTH

Grows to 25 feet tall or higher depending upon conditions.

### ORNAMENTAL FEATURES

Narrow to rounded crown. In winter it makes a striking silhouette with bare branches angling out and up from main trunk and reddish bark peeling away in paper thin sheets. Late to leaf out in spring; leaves are divided into three coarsely toothed leaflets 1 1/2 to 2 1/2 inches long, dark green above and silvery below. Inconspicuous red flowers in spring develop into showy winged seeds. Foliage turns brilliant red in fall.

### USE

Lawn specimens or in groups.

### CULTURE

Grows best in full sun or partial shade.

### DROUGHT TOLERANCE

Provide occasional deep waterings during dry periods.

### PRUNING

Prune when dormant.

### INSECTS AND DISEASES

None significant.

### MAINTENANCE ISSUES

Leaves and seeds create litter.

### NATIVE RANGE

China.

## PERSIAN PARROTIA

*Parrotia persica*

### SIZE AND RATE OF GROWTH

Slow growing to 30 feet.

### ORNAMENTAL FEATURES

Choice and colorful attractive all seasons. Most dramatic display comes in the fall, leaves usually turn from golden yellow to orange and rosy pink then scarlet. Bark is attractive in the winter, smooth gray in color and flaky. Foliage is thick with dark green oval 3 to 4 inch long leaves. Flowers in the spring before leaves open.

### USE

Use as lawn specimen or as a group.

### CULTURE

Plant in full sun.

### DROUGHT TOLERANCE

Moderate, will endure some aridity.

### PRUNING

To train as a tree stake and shorten lower branches. Allow upper branches to take their wide spreading habit. When tree reaches desired height, remove lower shortened side branches.

### INSECTS AND DISEASES

None significant.

### MAINTENANCE ISSUES

None significant.

### NATIVE RANGE

Iran.

## SOUR GUM

*Nyssa sylvatica*

### SIZE AND RATE OF GROWTH

Grows from 30 to 50 feet with a spread of up to 25 feet. Slow growth.

### ORNAMENTAL FEATURES

One of the best trees for fall color. Pyramidal when young spreading and irregular shaped with age. Crooked branches and twigs with dark red tinged bark make dramatic picture against winter sky. Dark green, glossy leaves are 2 to 5 inches long. Leaves appear late in the spring and turn coppery red in the fall before falling. Flowers are inconspicuous. Bluish black fruit shaped like small olives are attractive to birds.

### USE

Use as a lawn specimen or in a group.

### CULTURE

Plant in full sun. Grows well in any soil and tolerates poor drainage.

### DROUGHT TOLERANCE

Good.

### PRUNING

Prune when dormant for shape.

### INSECTS AND DISEASES

None significant.

### MAINTENANCE ISSUES

Fruit may be messy.

## COLISEUM MAPLE

*Acer cappadocicum*

### SIZE AND RATE OF GROWTH

Grows to 35 feet tall.

### ORNAMENTAL FEATURES

Bright red spring foliage turns rich dark green. Forms compact rounded crown. Leaves with five to seven lobes 5 1/2 inches wide.

### USE

Lawn specimen.

### CULTURE

Full or part shade.

### DROUGHT TOLERANCE

Moderate. Occasional deep waterings during dry season.

### PRUNING

Prune when dormant to maintain shape.

### INSECTS AND DISEASES

Root rot.

### MAINTENANCE ISSUES

Difficult to garden below due to root system.

### NATIVE RANGE

Western Asia.



## AMERICAN YELLOWWOOD

*Cladrastis lutea*

### SIZE AND RATE OF GROWTH

Slow growing from 30 to 35 feet tall.

### ORNAMENTAL FEATURES

Leaves are divided from 8 to 12 inches wide. Bright green in summer and brilliant yellow in the fall. May not flower until ten years old, when it does, flowers are very fragrant.

### USE

Lawn specimen, terrace or patio applications.

### CULTURE

Plant in full sun with moderate water.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

Prune when young top shorten side branches. Remove lower branches entirely when tree has reached desired height.

### INSECTS AND DISEASES

None serious.

### MAINTENANCE ISSUES

None major.

### NATIVE RANGE

Southeastern united States.

## KOBUS MAGNOLIA

*Magnolia kobus*

### SIZE AND RATE OF GROWTH

Grows to 30 feet with a 20 foot spread. Slow growth.

### ORNAMENTAL FEATURES

Sturdy tree with white 4 inch star shaped flowers. Will flower after 15 years.

### USE

As a lawn specimen or as a group.

### CULTURE

Hardy tree. Adapts to climate. Plant in full sun or part shade.

### DROUGHT TOLERANCE

Moderate; needs deep through waterings during dry periods.

### PRUNING

Prune only when absolutely necessary right after bloom

### INSECTS AND DISEASES

Scale aphids and spider mites. Salt damage and chlorosis from lack of iron.

### MAINTENANCE ISSUES

Avoid soil compaction around root area.

### NATIVE RANGE

Southeastern united States.

## CHERRY DOGWOOD

*Cornus mas*

### SIZE AND RATE OF GROWTH

20 to 25 feet tall by 15 to 20 feet in width; moderate growth.

### ORNAMENTAL FEATURES

Large multi-stemmed shrub or small tree of oval to rounded outline, with exfoliating, flaky bark. Dark green summer foliage turns yellow in the fall. Small yellow flowers appear along the bare branches in March. Bright cherry red fruit appear in July or August. The fruit are eaten by birds and may also be used in preserves.

### USE

Lawn specimen, foundation planting and street tree.

### CULTURE

Plant in sun to partial shade. Prefers rich, well drained soil. Withstands sub zero temperatures and tolerates alkaline soils. Transplants well when young.

### DROUGHT TOLERANCE

Moderate to good.

### PRUNING

Often seen as a large shrub but can be trained as a single stemmed tree.

### INSECTS AND DISEASES

None serious.

### MAINTENANCE ISSUES

Early fall fruit drop may cause a mess on sidewalks or driveways.

### NATIVE RANGE

Central and southern Europe, western Asia.

## WASHINGTON HAWTHORNE

*Crataegus phaenopyrum*

### SIZE AND RATE OF GROWTH

20 to 30 feet tall with 20 foot spread; moderate growth.

### ORNAMENTAL FEATURES

Broadly oval to rounded habit. Two to three inch leaves with three to five pointed lobes, emerge reddish purple, turning to dark green in the summer. Fall color usually in shades of orange to red. White flower clusters appear in June. Bright red fruit emerge in the fall and persist until mid March.

### USE

Street tree, lawn specimen and screen.

### CULTURE

Prefers full sun in a well drained soil. Tolerates slightly acidic to alkaline soils. Because it develops a taproot, transplanting is most successful when plant is young.

### DROUGHT TOLERANCE

Very Good.

### PRUNING

Will tolerate shearing for use as a screen; prune when dormant.

### INSECTS AND DISEASES

Hawthorns are generally susceptible to many insect and disease problems. This particular species has shown more resistance to rust diseases than other hawthorns.

### MAINTENANCE ISSUES

Slim, straight one to three inch thorns make this plant difficult to handle and it should not be used in a high traffic area.

### NATIVE RANGE

Eastern and central United States.

## ORNAMENTAL CRABAPPLE

*Malus spp.*

### SIZE AND RATE OF GROWTH

Generally less than 30 feet tall; moderate growth.

### ORNAMENTAL FEATURES

Commonly small trees with rounded to oval habit though the habit will vary depending on the species, variety and cultivar. Foliage color is predominantly medium green with some plants having significant fall color. Most have beautiful flowers which bloom in May. Fruit is usually less than two inches with the color ranging from pure red to pure yellow.

### USE

Lawn specimen and mass planting.

### CULTURE

Full sun best for development of flowers. Generally prefer well drained, moist, acidic soil.

### DROUGHT TOLERANCE

Most have moderate drought tolerance.

### PRUNING

Best done immediately after flowering since flower buds for the next season are initiated in mid June to early July.

### INSECTS AND DISEASES

Scale infestations or borers are the most serious. Some species and cultivars are more resistant to certain problems than others.

### MAINTENANCE ISSUES

Spraying and pruning must be performed regularly to ensure good growth.

### NATIVE RANGE

Depends upon species, variety and cultivar.

## JAPANESE ZELKOVA

*Zelkova serrata*

### SIZE AND RATE OF GROWTH

50 to 80 feet tall; moderate to fast growth.

### ORNAMENTAL FEATURES

This elm tree relative is low branched, with a vase shaped outline and a rounded top. As tree matures, the bark begins to exfoliate. Dark green leaves are oval and slightly rough on top. Fall color varies from red to yellow. Flowers and tiny woody fruit are inconspicuous.

### USE

Street tree and lawn specimen.

### CULTURE

Full sun. Adaptable to many soil types but exhibits best growth in well drained soils. Reasonable pollution tolerant. Transplants easily.

### DROUGHT TOLERANCE

Once the plant is established, it shows good drought tolerance.

### PRUNING

Dense crown may be thinned when young.

### INSECTS AND DISEASES

Resistant to Dutch elm disease and elm leaf beetle.

### MAINTENANCE ISSUES

May be susceptible to damage from late frost when young.

### NATIVE RANGE

Japan.

## KATSURA TREE

*Cercidiphyllum japonicum*

### SIZE AND RATE OF GROWTH

Usually to 60 feet in cultivar with variable spread; may reach heights of 100 feet in the wild. Moderate growth.

### ORNAMENTAL FEATURES

A multi stemmed or single trunked tree, narrow when young, broadly spreading with age, as space allows. Oppositely arranged leaves are roundish with heart shaped base. The leaves emerge tinged in red, turn blue green during the summer and often achieve a yellow to apricot color in the fall. The leaves often emit a spicy scent as they fall in the autumn. Flowers are small and inconspicuous; fruit on female plants are dry pods with winged seeds.

### USE

Single stemmed form adaptable as a street tree. Also a graceful lawn specimen.

### CULTURE

Prefers full sun but can tolerate light shade. Prefers moist rich soils. Harder to establish if transplanted as an older tree.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

May require pruning to establish a single stemmed habit.

### INSECTS AND DISEASES

None serious.

### MAINTENANCE ISSUES

This tree has a tendency to break in ice storms and snowstorms.

### NATIVE RANGE

Japan and China.

## RED HORSECHESTNUT

*Aesculus x carnea*

### SIZE AND RATE OF GROWTH

Normally grows to about 40 feet in height with a spread of 30 feet, although can grow to 70 feet; moderate growth.

### ORNAMENTAL FEATURES

Round headed tree with large dark green palmate leaves divided into five leaflets. Fall leaf color is not significant. In springtime this tree will bear eight inch plumes of pinkish red flowers. The one to two inch round capsuled fruit are slightly prickly.

### USE

Lawn specimen.

### CULTURE

Best grown in full sun but can adapt to light shade. Adaptable to many soil types. Tolerant of the urban environment.

### DROUGHT TOLERANCE

Moderate. Without summer irrigation during dry periods, leaves scorch then drop prematurely.

### PRUNING

Interior branches may need to be removed to open canopy of older specimens.

### INSECTS AND DISEASES

Susceptible to many problems, including Japanese beetles, mildew and rust diseases.

### MAINTENANCE ISSUES

Large leaves, flowers and fruit create litter.

### NATIVE RANGE

This is a hybrid with parents from the Balkan Peninsula and the central United States.



## FLOWERING PEAR

*Pyrus spp.*

### SIZE AND RATE OF GROWTH

Varies depending upon species. Generally grow to 30 feet.

### ORNAMENTAL FEATURES

Planted for attractive flowers in the spring and as smaller shade trees.

### USE

Use as lawn specimens in groups or as street trees. Good for wildlife.

### CULTURE

Requires well draining, well aerated soil. Plant in full sun.

### DROUGHT TOLERANCE

Best with occasional summer water.

### PRUNING

Prune as little as possible. Remove crossing branches while tree is in bloom.

### INSECTS AND DISEASES

Slugs, caterpillars, root rot, fireblight.

### MAINTENANCE ISSUES

May require spraying to eliminate pests. Fruit may be messy.

### NATIVE RANGE

Depends upon species.

## HEDGE MAPLE

*Acer campestre*

### SIZE AND RATE OF GROWTH

Slow growing to 70 feet in nature, 30 feet in cultivation.

### ORNAMENTAL FEATURES

Grows especially dense, compact and rounded. Leaves 2 to 4 inches wide with three to five lobes, dull green color above. Leaves turn yellow in the fall.

### USE

Lawn specimen.

### CULTURE

Fibrous root system takes water and nutrients from the topsoil. Canopy of leaves needs a constant supply of water.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

Prune when dormant.

### INSECTS AND DISEASES

Leaf burn in hot areas.

### MAINTENANCE ISSUES

Leaf fall.

### NATIVE RANGE

Europe.

## AMERICAN SWEETGUM

*Liquidambar styraciflua*

### SIZE AND RATE OF GROWTH

Moderate growth to 60 feet.

### ORNAMENTAL FEATURES

Narrow and erect in youth. In winter branching pattern, furrowed bark, corky wings on twigs and hanging fruit give interest, in spring and summer leaves are deep green, in fall leaves turn purple, yellow or red.

### USE

Use as specimen tree .

### CULTURE

Tolerates damp soil. Plant in full sun with neutral or slightly acid soil.

### DROUGHT TOLERANCE

Water 1 to 2 times per month during dry season.

### PRUNING

Prune only to shape when dormant.

### INSECTS AND DISEASES

Resistant to oak root fungus. Chlorosis in alkaline soils. May break in ice storms.

### MAINTENANCE ISSUES

Rake fruit fall in the spring.

### NATIVE RANGE

Eastern united States.

## ENGLISH OAK

*Quercus robur*

### SIZE AND RATE OF GROWTH

60 to 70 feet tall and nearly as wide; moderate to fast growth.

### ORNAMENTAL FEATURES

Large round headed outline. Leaves dark green with three to seven pairs of rounded lobes. No fall color leaves either drop green or turn brown and persist. Acorn one to two inches long with the cup covering 1/3 of the nut.

### USE

Lawn specimen and other large scale landscapes.

### CULTURE

Prefers full sun but can tolerate light shade. Moderately tolerant of the urban environment.

### DROUGHT TOLERANCE

Good.

### PRUNING

Low branches may need to be removed to raise the crown.

### INSECTS AND DISEASES

Highly susceptible to mildew.

### MAINTENANCE ISSUES

None serious.

### NATIVE RANGE

Europe, northern Africa, western Asia.

## RED MAPLE

*Acer rubrum*

### SIZE AND RATE OF GROWTH

40 to 60 feet tall in cultivation with a 20 foot spread; height may reach 120 feet in the wild; moderate to fast growth.

### ORNAMENTAL FEATURES

Upright oval habit develops with age. Red dominates the features of this tree. Twigs have reddish cast. Buds are red, as are the emerging leaves. Fall color is variable from tree to tree, but is generally a rich scarlet color. Flowers on female trees are showy for maples – appearing red in march before the leaves emerge. Winged fruit is often red maturing to brown.

### USE

Lawn specimen and street tree.

### CULTURE

Prefers full sun but will adapt to partial shade. Tolerates a variety of soil conditions.

### DROUGHT TOLERANCE

Poor to moderate.

### PRUNING

Corrective pruning needed to remove narrow branch angles.

### INSECTS AND DISEASES

None serious.

### MAINTENANCE ISSUES

May be subject to breakage from heavy snows or ice.

### NATIVE RANGE

Eastern and central united States.

## NORWAY MAPLE

*Acer platanoides*

### SIZE AND RATE OF GROWTH

Normally 50 to 60 feet tall, occasionally to 90 feet with a spread 2/3 or equal to the height; moderate growth.

### ORNAMENTAL FEATURES

Large tree with dense, rounded crown. Leaves are four to seven inches wide and are dark green turning to yellow in the fall. Individual flowers are small but form showy clusters. Abundant winged seeds hang on long stalks.

### USE

Lawn specimen and street tree.

### CULTURE

Prefers full sun or light shade. Tolerant of wide range of soil types and urban conditions.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

Needs little pruning.

### INSECTS AND DISEASES

Aphid infestations, especially in spring and verticillium wilt.

### MAINTENANCE ISSUES

This tree has dense surface rooting. Aphid infestations produce honeydew which can drip onto cars and sidewalks.

### NATIVE RANGE

Europe, northern Turkey and northern Iran.

# GINKGO TREE

*Ginkgo biloba*

## SIZE AND RATE OF GROWTH

50 to 60 feet tall in cultivation with a variable spread; may grow to 90 feet tall in the wild. Moderate growth.

## ORNAMENTAL FEATURES

Open and narrowly conical when young but becomes a broad well proportioned tree with age. Leaf shape is a distinctive fan shape. Foliage color is light green in the spring and summer becoming bright yellow in the fall. Flowers are inconspicuous. The fruit when produced on female trees is a seed with a fleshy covering about one to one and one half inches long.

## USE

Lawn specimen and other large scale landscapes.

## CULTURE

Adaptable to a wide variety of growing conditions. Prefers full sun and is tolerant of air pollution. Transplants easily.

## DROUGHT TOLERANCE

May need watering during dry season until it is 10 to 15 feet tall, then it will become self sufficient.

## PRUNING

Needs little pruning.

## INSECTS AND DISEASES

None serious.

## MAINTENANCE ISSUES

The fleshy covering of the seed on the female tree is extremely messy and foul smelling. Seeds are not produced until the tree is 10 to 15 years old. To avoid the seeds plant only the male trees.

## NATIVE RANGE

Southeast China.

## EUROPEAN HORNBEAM

*Carpinus betulus*

### SIZE AND RATE OF GROWTH

40 to 60 feet tall with a 38 to 40 foot spread; moderate growth.

### ORNAMENTAL FEATURES

Young tree pyramidal becoming rounded at maturity. Oval leaves dark green in summer, often turning yellow in late fall. Leaves may be persistent and dried leaves are often found on trees in the winter. Flowers are borne in clusters, each with a conspicuous three lobed bract. The nut is borne at the base of the flower bract.

### USE

Street tree, lawn specimen and pruned as a hedge.

### CULTURE

Prefers full sun but can tolerate light shade. Tolerates a wide variety of soil conditions but does best on well drained sites. Tolerates the urban environment. Best if transplanted when young.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

Withstands heavy pruning and is often clipped into hedges or screens.

### INSECTS AND DISEASES

None serious.

### MAINTENANCE ISSUES

Frequent pruning will be required to maintain hedge.

### NATIVE RANGE

Europe to Iran.



## PAPER BIRCH

*Betula papyrifera*

### SIZE AND RATE OF GROWTH

In this cultivation, grows 60 to 80 feet tall with a spread 1/2 to 2/3 the height; in the wild, attains heights up to 100 feet. Moderate to fast growth.

### ORNAMENTAL FEATURES

Narrowly pyramidal when young, becoming round topped at maturity. The prized feature of this plant is the white trunk whose outer bark peels off in paper thin strips. Leaves are medium green, often turning to bright yellow in the fall. Flowers are small catkins in spring. Nutlet fruit, which are valued by wildlife, appear in the fall.

### USE

Lawn specimen and groupings. Especially effective when planted with dark colored plants such as conifers. Good for wildlife.

### CULTURE

Prefers full sun but can tolerate light shade, with well-drained soil.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

Pruning cuts are slow to heal.

### INSECTS AND DISEASES

Aphids and leaf miners.

### MAINTENANCE ISSUES

Aphid infestations often produce honeydew, which drips onto anything below the tree. This species is less susceptible to ice breakage than other birches, due to stronger wood.

### NATIVE RANGE

Northern North America

## PIN OAK

*Quercus palustris*

### SIZE AND RATE OF GROWTH

50 to 80 feet tall with a spread of 35 to 45 feet; moderate fast growth.

### ORNAMENTAL FEATURES

Often planted for its branching pattern. The lower branches are pendulous, the middle ones are horizontal and the upper branches grow upright. Foliage is dark green and deeply cut into pointed lobes. Fall color is variable and may be bronze to red. Leaves often persist on the tree through the winter. Fruit is an acorn, 1/2 inch long and light brown.

### USE

Lawn specimen in an area with ample room for branching. The pendulous lower branches make this tree inappropriate for street tree use. Good for wildlife.

### CULTURE

Prefers full sun. Tolerates wet soils and urban pollution. Suffers chlorosis in alkaline soils. Transplants easily.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

The lower pendulous branches can be pruned but the middle horizontal branches then will begin to droop. Prune when dormant.

### INSECTS AND DISEASES

Occasional scale or gall.

### MAINTENANCE ISSUES

The low hanging limbs can obstruct traffic. Planting in alkaline soils will result in chlorosis, which can be treated with iron chelate.

### NATIVE RANGE

Eastern United States

## RED OAK

*Quercus rubra*

### SIZE AND RATE OF GROWTH

50 to 80 feet tall with a spread of 40 to 50 feet; moderate to fast growth.

### ORNAMENTAL FEATURES

Matures to a dome shaped spread, wide spreading, dense form with upcurving branches. High branching habit. As trees mature, the upper limbs show a dark streaking over the gray, as if paint had been spilled at the branch junction. New leaves and leaf stalks are often red when emerging. Leaves are dark green during summer, turning red to brown in fall. Acorn is small about 3/4 to 1 inch.

### USE

Lawn specimen or other large scale landscapes.

### CULTURE

Grows best in full sun in moist, acidic soils but will tolerate other conditions. Performs well in the urban environment.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

Rarely needed. If needed prune when dormant.

### INSECTS AND DISEASES

Scale.

### MAINTENANCE ISSUES

May develop chlorosis in high pH soils.

### NATIVE RANGE

Eastern north America

# TULIP TREE

*Liriodendron tulipifera*

## SIZE AND RATE OF GROWTH

To 80 feet tall in cultivation with a spread of 30 to 35 feet; in the wild it may reach heights of 150 feet. Fast growth.

## ORNAMENTAL FEATURES

Tall, stately tree with a conical form when young, becoming broadly pyramidal with age. Leaves are missing the center point and are indented in a saddle like depression. Medium to yellow green leaf color in the summer, turning yellow in the fall. The flowers are tulip shaped and fragrant. Unfortunately they are not showy. Flowers are a greenish cream color except for an orange band at the base. They are not produced on young trees and are found high in the canopy. Brown fruit in October.

## USE

Needs much space. Best in parks.

## CULTURE

Best grown in full sun in rich deep moist acidic to neutral soils. Tolerates poorly drained sites. Due to a deep taproot, transplanting is most successful when plant is young.

## DROUGHT TOLERANCE

Moderate.

## PRUNING

Generally requires little pruning, but a strong central leader is important. Remove upright shoots that arise from major laterals during the dormant season.

## INSECTS AND DISEASES

Few serious but aphids and scale can cause problems.

## MAINTENANCE ISSUES

Brittle wood may break in harsh storms. As with other large trees, spreading root system may cause difficulties within close radius of the tree.

## NATIVE RANGE

Eastern United States

## BUR OAK

*Quercus macrocarpa*

### SIZE AND RATE OF GROWTH

Moderate growth form 60 to 75 feet high and 30 feet wide.

### ORNAMENTAL FEATURES

Rugged looking with glossy green leave above and white below. Leaves are 8 to 10 inches long broad at the tip, tapered at the base and deeply lobed. Large acorns form in mossy cups.

### USE

Lawn specimen.

### CULTURE

Moderately tolerant of adverse conditions. Grows best in deep soils.

### DROUGHT TOLERANCE

Good once established.

### PRUNING

Prune when dormant if needed.

### INSECTS AND DISEASES

None serious.

### MAINTENANCE ISSUES

Acorns.

### NATIVE RANGE

Eastern united States.

## DAWN REDWOOD

*Metasequoia glyptostroboides*

### SIZE AND RATE OF GROWTH

Grows 80 to 90 feet high; very fast when young.

### ORNAMENTAL FEATURES

Resembles coast redwood but differs in several ways. Cones are much smaller; leaves are soft to the touch and light; bright green. Brown branchlets turn upward, Foliage turns light bronze in autumn then falls. New growth is attractive in spring.

### USE

Best in groves, but also works well as a single specimen.

### CULTURE

Grows best in moist but not boggy soil. Stands temperature extremes but can suffer wind damage in cold dry winds. Grows best in soil containing peat with good drainage. Plant in full sun.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

Prune when dormant if needed.

### INSECTS AND DISEASES

Resistant to oak root fungus.

### MAINTENANCE ISSUES

Needles create litter.

### NATIVE RANGE

California.

# LONDON PLANE TREE

*Platanus x acerfolia*

## SIZE AND RATE OF GROWTH

70 to 80 feet tall with a spread of 60 feet; moderate growth.

## ORNAMENTAL FEATURES

Pyramidal habit in youth, maturing to a broad symmetrical outline. Bark peels in large thin plates exposing olive green to creamy white coloration. Leaves resemble maple leaves; medium green in summer turning yellow brown in fall. Flowers are inconspicuous. Brown, ball-like seed cluster hang on long stalks and are persistent in the winter.

## USE

Lawn specimen. Often used as a street tree but may be too massive.

## CULTURE

Full sun or light shade. Adaptable to a wide range of soil conditions. Performs well under urban conditions. Transplants easily.

## DROUGHT TOLERANCE

Good.

## PRUNING

Tolerates pruning well and has been used as a hedge in high maintenance situations. Prune in the winter.

## INSECTS AND DISEASES

Anthrachnose causes leaf disfigurement and early drop.

## MAINTENANCE ISSUES

The foliage disintegrates slowly once on the ground and will require raking. Trees planted close to sidewalks may heave the sidewalks.

## NATIVE RANGE

This is a hybrid with parent species from Central North America and Southeastern Europe and Western Asia.

## DOUGLAS FIR

*Pseudotsuga menziesii*

### SIZE AND RATE OF GROWTH

Can grow to 70 to 200 feet tall, spread usually 1/3 the height; moderate to fast growth.

### ORNAMENTAL FEATURES

Symmetrical and dense habit. Old trunks often are divided into thick dark, reddish-brown ridges separated by deep irregular fissures. Needle-like foliage is flat, with white bands beneath. The hanging cones are distinctive with three-pronged projecting bracts at each scale.

### USE

Lawn specimen and in a grouping in a large area. Good for wildlife.

### CULTURE

Best when grown in full sun, but will tolerate light shade. Prefers neutral or slightly acidic well-drained soils. Transplants well balled and burlapped.

### DROUGHT TOLERANCE

Good.

### PRUNING

Seldom needed.

### INSECTS AND DISEASES

Canker disease, needle blight, aphids, Douglas fir bark beetle.

### MAINTENANCE ISSUES

High winds following heavy rainfall can result in branch breakage or the uprooting of the entire tree.

### NATIVE RANGE

Pacific Coast region of the United States and British Columbia.



## GRAND FIR

*Abies grandis*

### SIZE AND RATE OF GROWTH

Up to 300 feet tall.; slow growth.

### ORNAMENTAL FEATURES

Handsome, deep green 1-1/2 inch long needles in two rows along branches, glossy above with white lines beneath. Grown for Christmas trees and cuttings. Symmetrical growing habit.

### USE

Lawn specimen, good for wildlife.

### CULTURE

Plant in full sun or light shade.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

Shear for Christmas Tree look or prune lower branches to garden below.

### INSECTS & DISEASES

None Serious.

### MAINTENANCE ISSUES

May be too massive for the urban landscape.

### NATIVE RANGE

British Columbia to California.

# BIG LEAF MAPLE

*Acer macrophyllum*

## SIZE AND RATE OF GROWTH

Up to 90 feet in height with a wide spread; fast growth.

## ORNAMENTAL FEATURES

Wide spreading shade tree, often with multiple trunks. Thin bark is broadly ridged and varies from brown gray to brown tinged with red. The leaves are the largest of all maples, from eight to twelve inches in diameter. Fall color ranges from a bright yellow to orange. Small, yellow flowers hang in pendulous clusters four to six inches long and are fragrant. Winged fuzzy seeds also hang in pendulous clusters.

## USE

Lawn specimen and other large scale landscapes. Good with wildlife.

## CULTURE

Full sun exposure on a rich moist, well-drained site promotes the best growth, but will tolerate a wide range of soil conditions.

## DROUGHT TOLERANCE

Moderate.

## PRUNING

Prune in late summer or when dormant to avoid sap flow from cuts.

## INSECTS AND DISEASES

Root rot and tar spot fungus.

## MAINTENANCE ISSUES

Dense shade and vigorous surface roots restrict any  
Plant establishment beneath the tree.

## NATIVE RANGE

Southeast Alaska to California

## WESTERN RED CEDAR

*Thuja plicata*

### SIZE AND RATE OF GROWTH

Can grow to 200 feet in wild, spreading habit; moderate growth.

### ORNAMENTAL FEATURES

Neat, symmetrical plants that have scale-like leaves in flat sprays. Foliage is dark green and feathery with small, needlelike leaves and 1/2 diameter cones.

### USE

Lawn specimen or in groupings.

### CULTURE

Needs shade in hot summer areas, prefers moist soils.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

Pruning of lower branches will eliminate characteristic beauty of the trees branching pattern.

### INSECTS AND DISEASES

Heart rot.

### MAINTENANCE ISSUES

Small cones and scales can create litter.

### NATIVE RANGE

Alaska to California.

## WESTERN HEMLOCK

*Tsuga heterophylla*

### SIZE AND RATE OF GROWTH

100 to 200 feet tall in the wild but shorter in cultivation; moderate to fast growth.

### ORNAMENTAL FEATURES

This species has a narrow, pyramidal shape. Needles are fairly flat and dark green above. Cones are up to one inch in length and vary from light to reddish brown. The cones are usually produced in large quantities each year.

### USE

Lawn specimen and groupings in large scale landscapes.

### CULTURE

Tolerates sun or shade. Prefers moist, cool non-windy sites. Difficult to transplant.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

High tolerance of heavy shearing. Midsummer is the best time for this to be performed.

### INSECTS AND DISEASES

Adelges, spider mites, root rot and stem canker.

### MAINTENANCE ISSUES

Because of shallow roots and great size it is susceptible to uprooting. During long periods of hot dry weather, red spider mite infestations can become severe.

### NATIVE RANGE

Alaska to California

## CASCARA

*Rhamnus purshiana*

### SIZE AND RATE OF GROWTH

Small tree will grow from 20 to 40 feet; moderate growth.

### ORNAMENTAL FEATURES

Smooth gray or brownish bark has medicinal value. Dark green, prominently veined leaves are elliptical, 1 1/2 to 8 inches long to 2 inches wide usually somewhat tufted at the ends of branches. Foliage turns good yellow in the fall. Round black fruit attracts birds. Picturesque branching pattern.

### USE

Lawn specimen or to attract wildlife.

### CULTURE

Will grow in dense shade or full sun with ample water. Good for wildlife.

### DROUGHT TOLERANCE

Moderate.

### PRUNING

Prune to maintain branching pattern.

### INSECTS AND DISEASES

None serious.

### MAINTENANCE ISSUES

Fruit may be messy.

### NATIVE RANGE

California to British Columbia.

## VINE MAPLE

*Acer circinatum*

### SIZE AND RATE OF GROWTH

25 to 35 feet tall with similar spread, moderate to fast growth.

### ORNAMENTAL FEATURES

Large shrub to multi-stemmed tree, vine-like growth under forest conditions. The bark of the tree is smooth in texture and varies in color from green to bright red-brown. Leaves are almost round with seven to nine shallow lobes with pointed tips. Leaves emerge in spring with a red tint, turn green in summer and often exhibit early red fall color in sunny locations. Small reddish purple and with flowers appear in spring and are brighter than the flowers of many maples. Bright red winged seeds follow the flowers.

### USE

Lawn specimen, foundation plant and occasionally a street tree. Especially useful in semi-shady areas. Good for wildlife.

### CULTURE

Prefers partial shade, especially in urban settings.

### DROUGHT TOLERANCE

Poor in full sun, moderate to good in partial shade.

### PRUNING

May require pruning to maintain single stemmed habit.

### INSECTS AND DISEASES

Root to and stem canker.

### MAINTENANCE ISSUES

Can become sprawling. Older multi-stemmed trees may split at the base.

### NATIVE RANGE

British Columbia to northern California.

## SHORE PINE

*Pinus contorta*

### SIZE AND RATE OF GROWTH

Grows fairly fast from 20 to 35 feet.

### ORNAMENTAL FEATURES

Good looking tree in its youth. Densely foliated tree with needles in pairs 1 1/4 inches to 2 inches long. Dark green color with 1-2 inch light yellow to brown cones.

### USE

One of the best pines for small gardens; grows well in containers. Good for wildlife.

### CULTURE

Does not tolerate pollution or wet soils. Pollution may cause needle drop.

### DROUGHT TOLERANCE

Moderate. Does not do well in over watered soils.

### PRUNING

Takes pruning well, prune in spring to maintain shape.

### INSECTS AND DISEASES

European pine shoot moth. Subject to a number of other pests.

### MAINTENANCE ISSUES

Needle drop and cones can create litter.

### NATIVE RANGE

California to Alaska.

## PROHIBITED STREET TREES

There are several varieties of trees which are currently prohibited for use as street trees within the City of Covington. Trees on this list typically have poor growth habits, are susceptible to disease, pests or breakage, bear fruit, have invasive roots, prevent visibility, or reach a mature height not appropriate for street situations.

The following is the list of prohibited trees:

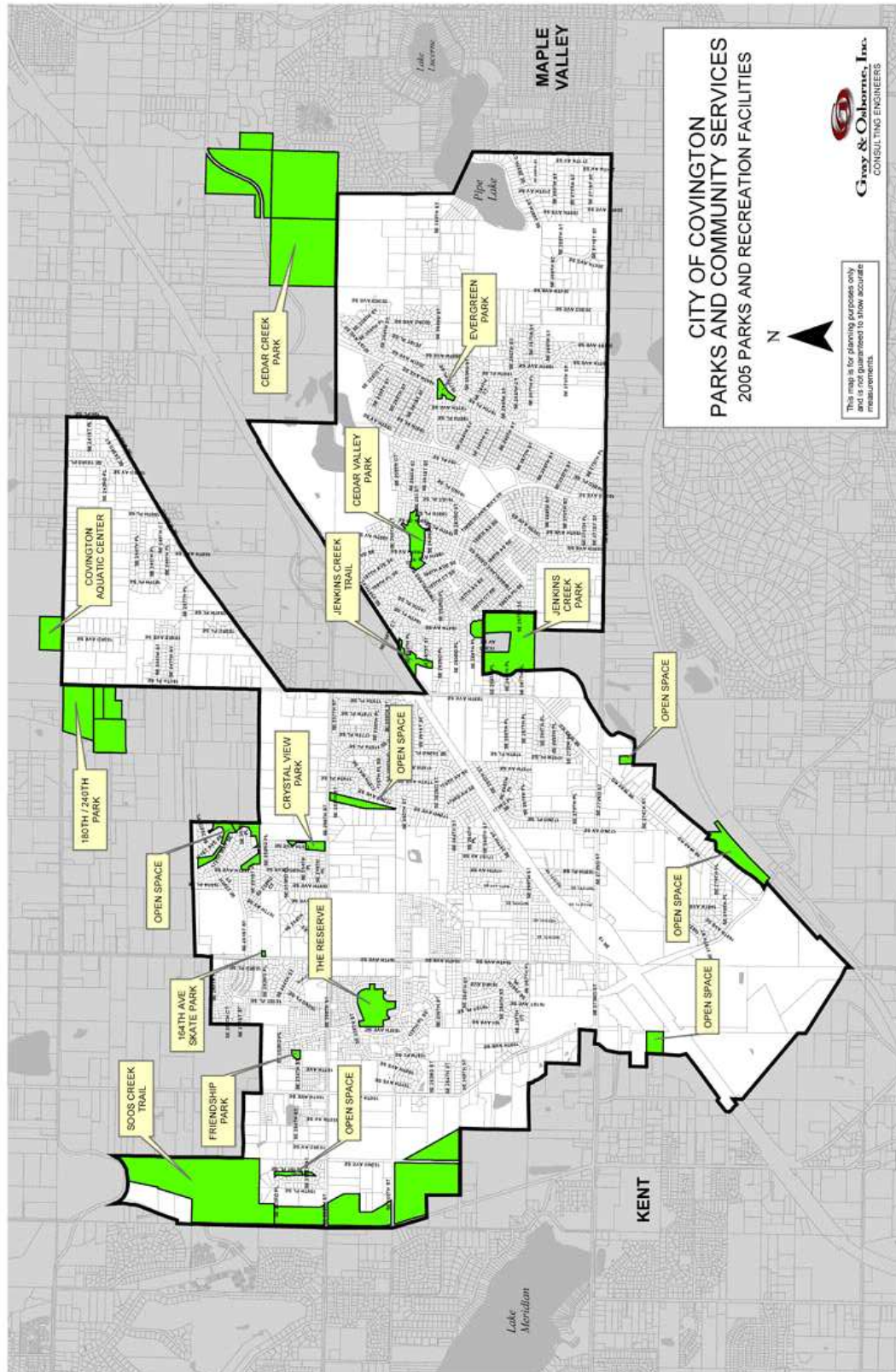
1. Box Elder
2. Silver Maple
3. Weeping Willows
4. Fir
5. Cedar
6. Hemlock
7. Spruce
8. Pine
9. Poplar
10. Any nut or fruit bearing tree except  
ornamentals.





PARK AND OPEN SPACE AREAS

# PARK LOCATIONS



## CEDAR CREEK PARK

### DESCRIPTION

30 acres of Cedar Creek Park were acquired by the City of Covington in 2003 with the assistance of a Conservation Futures Grant. The park features high quality wetlands, creek, trails and diverse habitat areas. The additional 80 acres of the park is owned by King County.

### ANALYSIS

Cedar Creek park is a natural area. Action should be planned and implemented following the completion of a tree inventory and operation plan for the park. As a general goal, hazard trees with high target potential should be converted to wildlife snags or removed and understory and creek side planting continued to ensure continued forest cover.

INSERT TREE INVENTORY MATRIX AND  
LOCATION MAP WHEN COMPLETED



## CEDAR VALLEY PARK

### DESCRIPTION

The 6.75 acre natural area was acquired in 2002.

### ANALYSIS

Cedar Valley Park is a natural area. Action should be planned and implemented following the completion of a tree inventory and operation plan for the park. As a general goal, hazard trees with high target potential should be converted to wildlife snags or removed and understory and creek side planting continued to ensure continued forest cover.

INSERT TREE INVENTORY MATRIX AND  
LOCATION MAP WHEN COMPLETED





## COVINGTON AQUATIC CENTER

### DESCRIPTION

The aquatic center was acquired from King County in 2004. The facility contains a 25-meter indoor pool with water slide and room available for rentals.

### ANALYSIS

The Aquatic Center has a few trees located within the boundary of the property. Action should be planned and implemented following the completion of a tree inventory and operation plan for the area.

INSERT TREE INVENTORY MATRIX AND  
LOCATION MAP WHEN COMPLETED



## CRYSTAL VIEW PARK

### DESCRIPTION

The 2.2 acre parcel was acquired in 2000 and constructed in 2003. It was Covington's first park. It features a half basketball court, play equipment and picnic tables.

### ANALYSIS

Action should be planned and implemented following the completion of a tree inventory and operation plan for the park. As a general goal, hazard trees with high target potential should be converted to wildlife snags or removed and understory and creek side planting continued to ensure continued forest cover.

INSERT TREE INVENTORY MATRIX AND  
LOCATION MAP WHEN COMPLETED



## DOWNTOWN MEDIAN

### DESCRIPTION

The downtown medians were planted by contractors working for the State Department of Transportation as a part of the SR 516 improvement project. The trees are maintained by contractors hired by the City.

### ANALYSIS

Action should be planned and implemented following the completion of a tree inventory and operation plan for the medians. As a general goal, trees should be pruned to maintain shape and health and to remove visual or physical hazards.

INSERT TREE INVENTORY MATRIX AND  
LOCATION MAP WHEN COMPLETED

## EVERGREEN PARK

### DESCRIPTION

Evergreen Park was obtained from King County in 2000. When completed, the park will feature: A play area for pre-school children, natural area and walking path.

### ANALYSIS

Action should be planned and implemented following the completion of a tree inventory and operation plan for the park. As a general goal, hazard trees with high target potential should be converted to wildlife snags or removed and understory and creek side planting continued to ensure continued forest cover.

INSERT TREE INVENTORY MATRIX AND  
LOCATION MAP WHEN COMPLETED





## FRIENDSHIP PARK

### DESCRIPTION

Friendship Park opened in 2004. The park is a converted storm water pond. The .6 acre park features a basketball court, picnic area, play equipment walking path and grassy area for informal play.

### ANALYSIS

All of the trees located in Friendship Park were planted in 2004 as part of the construction of the park. The trees were rescued from a commercial construction site with the exception of one tree planted as a part of the Living Memorial Tree program. Action should be planned and implemented following the completion of a tree inventory and operation plan for the park. As a general goal, hazard trees with high target potential should be converted to wildlife snags or removed and understory and creek side planting continued to ensure continued forest cover.

INSERT TREE INVENTORY MATRIX AND  
LOCATION MAP WHEN COMPLETED



## 164th AVENUE SKATE COURT

### DESCRIPTION

The first City skate court opened in 2004. It features a 70 foot by 100 foot skating area with Huna ramps and web camera which allows visitors of the City web site the ability to view the park. Parking is not available.

### ANALYSIS

The skate court has a few trees located within the boundary of the court. Action should be planned and implemented following the completion of a tree inventory and operation plan for the area.

INSERT TREE INVENTORY MATRIX AND  
LOCATION MAP WHEN COMPLETED



## OPEN SPACES

### DESCRIPTION

The City of Covington also owns and maintains several additional open space areas within the community as indicated on the map. They feature creeks, mature trees and are largely inaccessible.

### ANALYSIS

Action should be planned and implemented following the completion of a tree inventory and operation plan for the areas. As a general goal, hazard trees with high target potential should be converted to wildlife snags or removed and understory and creek side planting continued to ensure continued forest cover.

INSERT TREE INVENTORY MATRIX AND  
LOCATION MAP WHEN COMPLETED

## 180TH/240TH STREET PARK

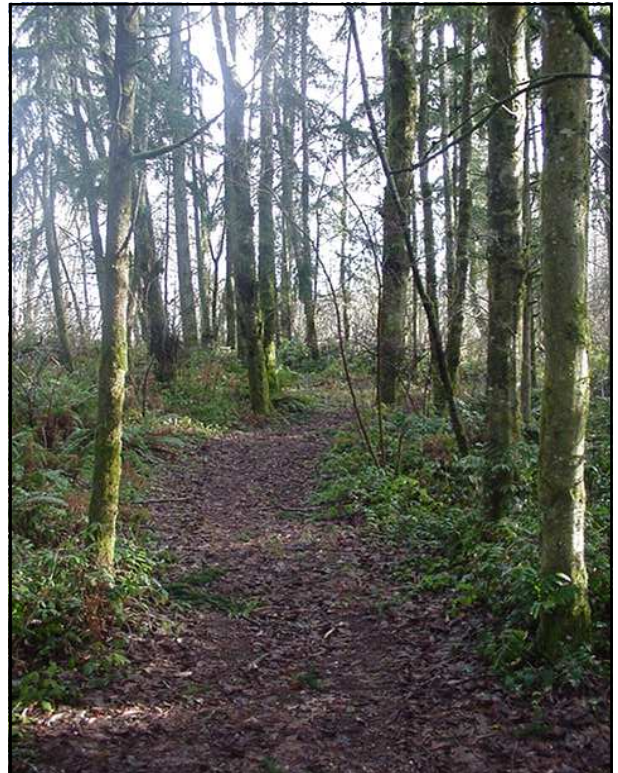
### DESCRIPTION

This park is located at the southwest corner of 180th and 240th streets. 10 acres for the park were acquired in 2002 and 20 acres in 2003. The property features rolling pastures with mature forest and trails. A master plan for the park was developed in 2003. Construction is anticipated to occur in 2007.

### ANALYSIS

The 180th/240th Park site is planned to be a mixed use active passive park. Action should be planned and implemented following the completion of a tree inventory and operation plan for the park. As a general goal, hazard trees with high target potential should be converted to wildlife snags or removed and understory and creek side planting continued to ensure continued forest cover.

INSERT TREE INVENTORY MATRIX AND  
LOCATION MAP WHEN COMPLETED



## JENKINS CREEK COMMUNITY TRAIL

### DESCRIPTION

The first segment of the Jenkins Creek Regional Trail was completed in 2002. It is located north of SE 262nd and East of 180th. The trail will connect the Soos Creek Trail to the Lake Wilderness Trail when completed.

### ANALYSIS

Action should be planned and implemented following the completion of a tree inventory and operation plan for the community trail. As a general goal, hazard trees with high target potential should be converted to wildlife snags or removed and understory and creek side planting continued to ensure continued forest cover.

INSERT TREE INVENTORY MATRIX AND  
LOCATION MAP WHEN COMPLETED



## JENKINS CREEK PARK

### DESCRIPTION

Jenkins Creek Park was transferred from King County to the City in 2003. The 23 acre park features: Walking trails and natural areas.

### ANALYSIS

Action should be planned and implemented following the completion of a tree inventory and operation plan for the park. As a general goal, hazard trees with high target potential should be converted to wildlife snags or removed and understory and creek side planting continued to ensure continued forest cover. Understory plantings were completed in 2003 and 2004 in the West portion of the park.

INSERT TREE INVENTORY MATRIX AND  
LOCATION MAP WHEN COMPLETED







## ACTION PLAN

## ACTION PLAN

The following is an action plan to carry out tree and stump removal, pruning and planting activities identified in the individual park and open space business plans from the year 2007 through 2013. The action plan is to be used as a guide only, recognizing the need for flexibility to respond to emergency situations and shifts in funding and grant availability. There are six main areas which will be addressed in the action plan: Planning, tree pruning and removal, stump removal, tree planting, storm response and education.

### 2007

| Task                                 | Cost     |
|--------------------------------------|----------|
| Planning                             | \$25,000 |
| Tree Inventory (Parks/Medians)       |          |
| Community Forestry Grant Application |          |
| Planting                             | \$500    |
| Park area                            |          |
| Jenkins Creek Park                   |          |
| 180th/240th Park                     |          |
| Tree Removal & Pruning               | \$1,500  |
| Park area                            |          |
| Jenkins Creek Park                   |          |
| 180th/240th Park                     |          |
| Storm Response                       | \$1,500  |
| Education                            | \$100    |
| Brochure printing                    |          |
| Article                              |          |
| Tree City USA Application            |          |
| Arbor Day program                    |          |

### 2008

|                                      |          |
|--------------------------------------|----------|
| Planning                             | \$25,000 |
| Tree Inventory (Parks/Medians)       |          |
| Community Forestry Grant Application |          |
| Planting                             | \$5,000  |
| Park area                            |          |
| 180th/240th Park                     |          |
| Construction of Tree Nursery         |          |
| Plant Nursery                        |          |
| Tree Removal & Pruning               | \$1,500  |
| Park area                            |          |
| 180th/240th Park                     |          |
| Storm Response                       | \$1,500  |
| Education                            | \$50     |
| Article                              |          |
| Tree City USA Application            |          |
| Arbor Day program                    |          |

### 2009

|                           |         |
|---------------------------|---------|
| Planning                  | \$1,000 |
| Tree Planting Grant       |         |
| Planting                  | \$500   |
| Park area                 |         |
| Jenkins Creek Park        |         |
| Plant Nursery             |         |
| Tree Removal & Pruning    | \$1,500 |
| Park area                 |         |
| Jenkins Creek Park        |         |
| Storm Response            | \$1,500 |
| Education                 | \$100   |
| Brochure printing         |         |
| Article                   |         |
| Tree City USA Application |         |
| Arbor Day program         |         |

### 2010

|                           |          |
|---------------------------|----------|
| Planning                  | \$20,000 |
| Update Tree Inventory     |          |
| Planting                  | \$500    |
| Park area                 |          |
| Plant Nursery             |          |
| Tree Removal & Pruning    | \$1,500  |
| Park area                 |          |
| Open Space                |          |
| Storm Response            | \$0      |
| Education                 | \$50     |
| Article                   |          |
| Tree City USA Application |          |
| Arbor Day program         |          |

### 2011

|                           |         |
|---------------------------|---------|
| Planning                  | \$0     |
| Planting                  | \$500   |
| Park area                 |         |
| Jenkins Creek Park        |         |
| Tree Removal & Pruning    | \$1,500 |
| Park area                 |         |
| Jenkins Creek Park        |         |
| Plant Nursery             |         |
| Storm Response            | \$1,500 |
| Education                 | \$100   |
| Brochure printing         |         |
| Article                   |         |
| Tree City USA Application |         |
| Arbor Day program         |         |



## ACTION PLAN

### 2011

|                                |          |
|--------------------------------|----------|
| Planning                       | \$10,000 |
| Tree Inventory (Parks/Medians) |          |
| Community Forestry Grant       |          |
| Planting                       | \$500    |
| Park area                      |          |
| 180th/240th Park               |          |
| Plant Nursery                  |          |
| Tree Removal & Pruning         | \$1,500  |
| Park area                      |          |
| 180th/240th Park               |          |
| Open Space                     |          |
| Storm Response                 | \$1,000  |
| Education                      | \$100    |
| Brochure printing              |          |
| Article                        |          |
| Tree City USA Application      |          |
| Arbor Day program              |          |

### 2012

|                           |         |
|---------------------------|---------|
| Planning                  | \$0     |
| Planting                  | \$500   |
| Park area                 |         |
| Covington Aquatic Center  |         |
| Plant Nursery             |         |
| Tree Removal & Pruning    | \$1,500 |
| Park area                 |         |
| Covington Aquatic Center  |         |
| Open Space                |         |
| Storm Response            | \$1,000 |
| Education                 | \$50    |
| Article                   |         |
| Tree City USA Application |         |
| Arbor Day program         |         |

### 2013

|                           |          |
|---------------------------|----------|
| Planning                  | \$20,000 |
| Update Tree Inventory     |          |
| Update Forestry Plan      |          |
| Planting                  | \$500    |
| Park area                 |          |
| 180th/240th Park          |          |
| Plant Nursery             |          |
| Tree Removal & Pruning    | \$1,000  |
| Park area                 |          |
| 180th/240th Park          |          |
| Open Space                |          |
| Storm Response            | \$1,000  |
| Education                 | \$100    |
| Brochure printing         |          |
| Article                   |          |
| Tree City USA Application |          |
| Arbor Day program         |          |

## POTENTIAL FUNDING SOURCES

Funding has often been available for planting, purchasing and the installation of trees and management and educational purposes.

Listed below are funding sources which the City of Covington may wish to pursue to assist in the support of its community forestry program.

### MEMORIAL TREE PROGRAM

The memorial tree program was established in 2003 which trees are purchased and planted in honor of a birth, marriage, death of a loved one, birthday, anniversary or other event. Trees are selected from the approved tree list and planted in a park area. Along with the tree a dedication 3" x 8" plaque is be installed which identifies the donor, reason for donation and species of tree. The first memorial tree was planted in Friendship Park.

### SERVICE CLUBS

There are a number of service clubs in Covington. They often look to fund and/or support community oriented projects. They can be approached to "plant" and fund street tree plantings or one or trees in a park.

### CORPORATE SPONSORS

Small and large corporations can be approached to sponsor and/or fund tree planting or restoration efforts.

### CITY FUNDING

Covington makes tree preservation or replacement an automatic part of any street or park improvements or requirements for development. The City of Covington should establish a tree removal and replacement line item within the Parks and Facilities Division budget to assist in the tracking the maintenance of park related trees.

### AWC LOSS CONTROL GRANTS

Small grant fund which may be able to be used for hazardous tree removal.

### NATIONAL TREE TRUST GRANT

The National Tree Trust can provide up to 10,000 tree seedlings per year to applicants. Following the establishment of a city nursery, this grant program could be an on-going source of replacement trees.

### DEPARTMENT OF NATURAL RESOURCES COMMUNITY FORESTRY GRANT

This grant program may be used for education and planting purposes and should be pursued.

### ISTEA FUND

The ISTEA Program provides grants to historic sites for landscaping improvements.

### DEPARTMENT OF FISH AND WILDLIFE

The Fish and Wildlife Department has grant programs to help plant along river and stream corridors. This may be a possible source of funding for planting at the 180th/240th Park, Jenkins Creek Park, Jenkins Creek Community Trail and Cedar Creek Park.

### PUGET SOUND ENERGY

Puget Sound Energy has a tree planting program for trees to be planted under utility power lines.

### GLOBAL RELEAF

Global Releaf has established a grant program which provides matching funds for the purchase of trees.

### IAC WWRP, URBAN HABITAT & OTHER GRANTS

The State Interagency Committee for Outdoor Recreation administers a variety of grant programs which could be utilized for habitat and tree planting projects.

### KING COUNTY GRANTS

King County administers a variety of grant programs which could be utilized for habitat and tree planting projects.